Field Notes

in

Zoölogy

No. 16

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Pasadena, California.

Sept. 21 - 1905.

Saw, or rather, heard, first Intermediate Sparrows on the place this morning. Mountain Chickadees have been seen about the place the last few days. They are in full song. Also Parkman Wren, & Calif. Shrike.

Oct. 2

Caught behind sign down at Throop: -

1663. Myotis l. longicrus ♀ 102 x 48 x 8 fat.

Oct. 12

Have repeatedly seen a partial albino member of a flock of Brewer Blackbirds down at Throop lately. Saw the first Audubon Warblers on the place today.

Oct. 13

Brought in to Throop this afternoon: -

7420 Accipiter cooperi ♂

Oct. 16

Saw the first Ashy Kinglet in pepper-tree down street this morning.

Oct. 28 - 29

Went on C. O. C outing trip to Newhall. The hills and "mountains" in the vicinity are almost solidly clothed with greasewood (Adenostoma). Black Walnut (Juglans californica) occurs in low clumps in the lower ravines, and on the foothills immediately around

Newhall, are a great many white oaks (Quercus engelmanni (?) and a few live oaks (Q. agrifolia). Down the wash towards Saugus & the Santa Clara valley are extensive patches of Sage (Artemisia tridentata, and many cottonwoods. About 2 miles below Saugus, 5 below Newhall the water comes to the surface in the Santa Clara River and thick stretches of willow & cottonwood begin. The mistletoe clumps in the cottonwood attract many birds, just as at Victorville, & much the same species. The two days were hot, tho the night was so cold as to be almost frosty. Saw the following species:—

Valley Quail (Plentiful, tho on account of the high brush no one got the bag limit - 25); Mourning Dove (a great many come into water at night; also feeding in the fields); Western Redtail (3); Sparrow Hawk (few); Red-bellied HawK (one along river bottom); Pacific Horned Owl (3 flushed); Roadrunner (1); Cabanis Woodpecker (2 in river bottom); Nuttall Woodpecker (in willow-bottom and in live oaks on the hills); California Wdpkr (several in white oaks around Newhall); Williamson Sapsucker (one seen by Morcom in river bottom); Sierra Sapsucker (1 taken in river bottom, many borings in cottonwoods); Red-shafted Flicker (many in river-bottom); Dusky Poorwill (3 taken in foothills); Killdeer (many along river); Cassins Kingbird (2 along river); Say Phoebe (common);

Black Phoebe (several along river); California Horned Lark (flocks on pasture); California Jay (Common in hills); Brewer Blackbird (common along river); Western Meadowlark (many + large flocks on pastures); House Finch (flocks); Willow Goldfinch (very few along the river); Lawrence Goldfinch (heard in the foothills as well as along the river); Western Lark Sparrows (Very large flocks in white oaks, and along roads); Intermediate Sparrow (few in washes); Bell Sparrow (common in greasewood on hills); West. Chipping Sparrow (In white oaks + along river); Brewer Sparrow (several in sage wash); Sierra Junco (a few in cottonwds by river); Thick-billed Fox Sparrow (several under scrub oaks + greasewood on hillsides south of Newhall, singing loudly early in the morning); San Diego Song Sparrow (Common in river-bottom); Spurred Towhee and Anthony Towhee (few of each in foothills); Western Crow (several, + 1 large flock in Santa Clara river bottom); American Raven (Common + generally distributed); Hutton Vireo (a few in the live oaks in the hill canyons); Calif. Shrike (fairly common along pastures); Audubon Warbler (Commonest in cottonwoods); Am. Pipit (flocks along river); Mockingbird (2 in peppertrees in Newhall); Rock Wren (several in sage washes); San Diego Wren (common in hills); Parkman Wren (few in sage, and along river); Slender-billed Nuthatch (several

in white oaks, & in cottonwoods along river); Wren tit (few in hills); Calif. Bush tit (1 flock among hills); Plain Titmouse (pair in cottonwoods of river bottom); Western Gnatcatcher (common in sage washes); Dwarf Hermit Thrush (one in ravine in hills); Mountain Bluebird (large scattering flocks on stubble-fields & pastures); Western Bluebird (many in cottonwoods along river); Pasadena Thrasher (few in hills, but quiet).

7421 Black Phoebe ♂
7422 Rock Wren ♂
7423 Ashy Kinglet ♂
7424 Valley Partridge ♂
7425 Western Meadowlark ♀ im.
7426 Dusky Poor-will ♂
7427 Plain Titmouse ♀
7428 Mountain Bluebird ♀
7429 California Shrike ♀
7430 Nuttall Woodpecker ♂
7431 Sierra Sapsucker ♀
7432 Western Vesper Sparrow ♂
7433 " " " ♂ im.
7434 " " " ♀ im.
7435 " " " ♂
7436 Western Chipping Sparrow ♂ im.
7437 Willow Goldfinch ♀ im.
7438 Thick-billed Sparrow ♂ im.
7439 Bell Sparrow ♀ im.
7440 " " ♂ im.
7441 Western Savanna Sparrow ♂ im
7442 " " " ♂ im.

Pasadena

Nov. 8

1664 Thomomys ♂ 252×78×33 fat.

Nov. 22

7443 Whistling Swan ♀ (apparently first winter); shot by F. R. Harris on the "Pacific Gun Club" grounds near Newport Beach, between that and Huntington Beach. Measurements — length 1243 mm.; Stretch 2040; wing 520; tail 175; Weight 11 lbs.

Nov. 30

Spent the day at Glendora, walking up onto the foothills toward Sycamore Flats. Saw:- Western Robin (one in orange orchard); Dwarf Hermit Thrush (only 2 or 3 heard); Audubon Warbler (the most abundant species); Parkman Wren (several); Pasadena Thrasher (one heard); Mockingbird (several in Big Dalton Wash & in town); Western Lark Sparrow (one small flock); Golden-crowned and Intermediate Sparrows (both fairly numerous in foothills); Anthony Towhee (common); Red-shafted Flicker (common); Sparrowhawk (3); California Shrike (2); Anna Hummer (several around Nicotianas); Ruby-crowned Kinglet (1); Western Meadowlark (few); Valley Quail (quite numerous in the foothills); Say Phoebe (2 on foothills, one in pursuit of a sparrowhawk); California Jay (few in Big Dalton wash); House Finch (few); Willow & Arkansas Goldfinches (both common in

sunflower patches and in sycamores); Sierra Juncos (few on foothills); Wrentit (few) —— only 24 species, but then I wasn't paying particular attention to birds!

7444 Valley Quail ♂
7445 " " ♂
7446 " " ♀
7447 Rufous-crowned Sparrow ♂
7448 " " " ♀

Dec. 23

Went up the Arroyo Seco Canyon to the "Dutch Oven". The day was clear, but very frosty, there being ice all day in the shade. A recent severe north wind has swept down the canyon fowling over many large cottonwoods and alders, and even wrenching oak trees from the rocks on the canyon sides. Birds were not abundant (as usual in winter), being only noticeable in warm nooks where Audubon Warblers, Kinglets + Chickadees congregated; saw:—

Hermit Thrush (about a dozen seen); Solitaire (Taylor shot one near Dark Canyon); Ashy Kinglet (fairly common, all being cinereaceus); Mountain Chickadee (several, down nearly to Los Casitas); Sierra Creeper (one near "Dutch Oven," in golden oaks + spruces); Wren tit (common in brush, as usual); San Diego Wren (few); Pasadena Thrasher (only one or two heard low in the canyon); Dotted Canyon Wren (2 heard); Audubon Warbler (abundant); Dusky Warbler (2 shot below Los Casitas in live-oaks);

Hutton Vireo (several); Spurred and Anthony Towhees (common towards mouth of canyon); Fox Sparrows (fairly common; 8 specimens shot are apparently of three subspecies — megarhynchus, mendocinoides, and insularis !); Rufous-crowned Sparrow (Taylor shot one near Barker's old place); California Purple Finch (17 shot near mouth); Willow Goldfinch (heard among alders); California Jay (few; no other species); Anna Hummer (several); Cabanis & Nuttall Woodpeckers (few of each); Red-shafted Flicker (several); Cooper Hawk (1); Mountain Quail (3 small flocks); Say Phoebe (1)
— Total 28 species in the Canyon.

7449 Ashy Kinglet ♀
7450 " " ♀
7451 " " ♀
7452 " " ♂
7453 " " ♂
7454 " " ♂
7455 Hutton Vireo ♂ im ("windows" in skull)
7456 Dusky Warbler ♀
7457 San Diego Wren ♂
7458 Mountain Chickadee ♂
7459 Wren-tit ♂
7460 Calif. Purple Finch ♀
7461 Dwarf Hermit Thrush ♂
7462 " " " ♂
7463 " " " ♂
7464 Thick-billed Fox Sparrow ♂
7465 Kadiak Fox Sparrow ♂ im.

7466 Kadiak Fox Sparrow ♂ im.

7467 " " ♀ im.

Dec. 25

Along railroad to Glendora today, saw near Santa Anita a large flock of doves.

Dixon shot at El Monte: —

7468 Dwarf Hermit Thrush ♂

7469 Nuttall Woodpecker ♂

7470 Say Phoebe ♀

7471 Black Phoebe ♀

7472 Western Meadowlark ♂

7473 " " ♂

7474 California Shrike ♂

7475 House Finch ♂

Jan. 2, 1906

Down at Eastlake Park, Los Angeles, this morning, I saw a single Pied-billed Grebe, several pairs of Coots, 2 Tule Yellowthroats, several song sparrows, a flock of 13 Cedar Waxwings, large flock of Brewer Blackbirds, 2 or 3 Anthony Towhees, 1 Dwarf Hermit Thrush, and many Audubon Warblers; all in the Park.

Jan. 5

Went up the arroyo into the canyon a little above the quarry this afternoon. In the bottom above Devil's Gate every single bush of sumach (Rhus laurina) is dead or dying, the leaves curled & yellow & the stems brittle;

this is the case well up into the canyon mouth, but up on the sides of the mountain the plant is normal. No other species is affected similarly & I don't know how to account for it. Among birds, there is a remarkable scarcity of some species; for instance Intermediate Sparrows are altogether wanting where in usual years they are plentiful. Today I saw none anywhere, even here in town, or on the home place, but thought I heard one in a cypress at dusk on the way down Lincoln Ave. Saw and secured two Golden-crowned Sparrows in the Canyon above the quarry; also in the Canyon:— Nuttall Woodpecker(2); Red-shafted Flicker (3); Audubon Warbler (perhaps 50 all together); Ashy Knight (about 10); Dusky Hermit Thrush (6); Wren-tit (about 12); San Diego Wren (2); Out in the wash saw: Shrike (2); Meadowlark (1); Calif. Thrasher (1 heard); Mourning Dove (very large flocks feeding in truck or ground after sundown, fully 200 all together); Spurred Towhee (2); Anthony Towhee (perhaps 30); Ashy Knight (2); Audubon Warbler (about 20); Parkman Wren (1); Valley Quail (heard).

On mesa near Devil's Gate saw & heard in full song, a scattering flock of Meadowlarks. Birds scarce in species, & in individuals, save for Towhees & Audubon Warblers.

7476 Ashy Kinglet ♂
7477 " " ♂
7478 " " ♀
7479 " " ♀
7480 Audubon Warbler ♂
7481 Wren-tit ♂
7482 " ♀
7483 " ♀
7484 Dwarf Hermit Thrush ♂
7485 Golden-crowned Sparrow ♀
7486 " " " ♀

Jan. 9.

Mr. T. J. Ashby brought me, picked up dead at Playa del Rey this morning:—
7487 Pacific Kittiwake ♀

Jan. 20.

Went on a Physiography trip down to P. Fermin. Saw large numbers of White-throated Swifts flying back and forth along the cliffs; Burrowing Owl, Rock Wren, Intermediate Sparrow, Western Meadowlark and House Finch on the hills back of San Pedro; also back in the suburbs of the town several California Gulls flying back and forth over the same fields with Sparrow Hawks. Out in the surf and beyond saw Heermann and Western Gulls, Brandt and Farallone Cormorants and a very few Pelicans (Calif. Brown).

Feb. 2

In running across the Linda Vista bridge this morning, about 9 o'clock I saw a full-plumaged ♂ Rufous hummingbird. Got within 20 feet of it, as it perched on a dead twig, & saw its plain rufous back plainly. The red-flowered currant bushes are attracting lots of noisy anna hummers into the hills. Saw or heard also:- fermit Jaunders, Fox and golden-crowned sparrows ("I hear me" song of the latter), Spurred and brown towhees, thrasher, San Diego wren, wren tit, etc.

Feb. 3

Went out to Glendora today. Saw 7 cedar waxwings and a number of robins about the pepper trees in town. Also one phainopepla at the Wood place, and heard notes of others.

Feb. 5

1665 Lasiurus cinereus ♀ 138 x 58 x 10

Feb. 17

Went on a Physiography trip to San Pedro. Saw out near PT. Fermin 2 or 3 white-throated swifts, a pair of burrowing owls, many meadowlarks in full song and the other common birds of the coast and vicinity.

Feb. 19

Went down to arroyo near Linda Vista bridge at 8 o'clock this morning, and saw two Nuttall Woodpeckers, a rufous-crowned

sparrow in full song (resembling that of Lincoln's sparrow in some respects); golden-crowned sparrow (song); lutescent (or dusky) Warbler, etc.

Feb. 24

West from San Pedro and out to PT. Fermin today. Among land-birds, saw:— House finch, Anna Hummer, Say Phoebe, Willow Goldfinch, Am. Pipit, Wes Meadowlark, Intermediate Sparrow, Am. Sparrowhawk, Burrowing Owl, Parkman Wren, Rock Wren, Audubon Warbler, white-throated Swift, Brewer Blackbird, + Red-winged Blackbird. Among water-birds:— Cal. Brown Pelican (6), Brandt Cormorant, Western Gull, Herring Gull (2 adults flying close along bluff positively identified—pale mantles + black-tipped primaries); Glaucous-winged Gull (2 adults, plain pale gray mantles); Spotted Sandpiper (several along rocky shore at surf-line); Black Turnstone (at least two flocks of 15 to 20 along rocky beach just beyond the lighthouse, feeding at edge of surf, and flying out and around me in a dense flock with metallic cries, the flock shot into over the surf returning within range, so that all might have been secured without trouble).

7488 Black Turnstone ♂
7489 " " ♂
7490 " " ♂
7491 " " ♂
7492 " " ♂
7493 " " ♂
7494 Spotted Sandpiper ♂

March 3

Went over into hills west of the Linda Vista bridge an hour or so this afternoon. There are a great many hummers around the blossoming currants; saw several rufous besides the one shot, as well as other Allens and Annas.

7495 Rufous Hummer ♂
7496 Allen Hummer ♂
7497 " " ♂
7498 " " ♂
7499 Anna Hummer ♂

March 4

Saw several Violet-green Swallows flying West over North Pasadena late this afternoon. There are quite a few robins and cedar-birds about now, some in the pepper trees along the streets. A song sparrows' nest in pampas grass on the home place is full of young about 2 days old.

March 10, 1906

Went up Eaton Canyon Today with Finley and Walter Taylor, and located the Condor's nest. It held one egg [illegible] and careful not to disturb. Altho I got a "sour" smell up the wind from it, there was none of the expected filth about the nest, the egg being laid on a carpet of clean dry oak leaves which had collected from a tree close above. The nest was on an extremely steep (tho remarkably accessible) wall of the canyon not more than 200 feet above its bed. It was under an overhanging mass of rock and further protected by a slab of rock leaning up against the main mass, thus constituting a perfect shelter from wind, rain, or falling debris from the cliff above. A yucca grew a yard to one side and a small golden oak overhung the site a few yards above. ——— We found the nest only about 200 yards from where I saw the young one last spring. When we first got there we perched on the narrow trail on the opposite cliff & scanned the north face with a field-glass for a long time. We took note of several "whitewashed" ledges, on which I saw the old birds roosting last year. Finley stood on the trail as lookout, and Taylor & I clambered

into the canyon & worked our way up the opposite side to each of the whitewashed ledges, but with no further clew, & no condor as yet to be seen. We were a little above the level of Finley on the trail opposite, & fairly within shooting distance, and then we again waited in vain for sometime. Then I remembered that Finley had brought along a sawed-off rifle, & I yelled for him to fire it off. He did so, and shortly after the third report, Taylor excitedly called attention to a condor which made its appearance far below, partly clambering, partly flying up a ridge. It soon found a stable foothold & proceeded to quietly preen itself, picking out its breast feathers, & stretching out its wings alternately to our great interest. After some minutes it showed signs of restlessness, and after spreading its wings, and moving about on the ledge, it took wing across to another ledge. And soon it flew again, going from perch to perch, and circling close down toward the canyon bed. Finally it lit on a dead spruce stub just protruding above a ledge in the canyon side from us, and presently dropped down out of sight. We saw no more of the bird until she was

finally flushed from the nest. Meanwhile Finley had gone down into the canyon; then I went, leaving Taylor who stayed on watch a half hour longer, to see if the bird was scared out by the movements of the other two of us. But she evidently sat very close, for we afterward found that we had moved above and below her within less than 100 yards. After lunch, Finley took a conspicuous point on the south canyon wall for a lookout, and I started up toward the stub where we had last seen the condor, Taylor trying another route. I went up a slide, and suddenly got a sour smell, the wind direction indicating its origin over towards the stub. So I worked along in that direction until I could see the whole face of the wall and then yelled for Finley to fire his revolver. After the third report, the condor lowered up just about 20 feet above me, & perched quietly on a rock at the mouth of what soon proved to be the nest cavity. I backed down a bit, until Finley & Taylor could come to where I was. The bird finally flew up onto the stub before mentioned, & we had all kinds of views of her. After exploring for the best route

to follow in reaching the nest, & best places to plant cameras for the bird in flight. We left, the bird soon returning.

Other birds ~~seen~~ in Eaton Canyon were Cal. Purple Finch (singing loudly), Am. Dipper, Lutescent Warbler (in full song), White throated Swift, Golden Eagle, Dotted Canyon Wren, etc.

March 15.

A single ♂ Anna's Hooded Oriole on place this morning at 7 o'clock.

Finley phoned tonight that he tried to get up to Condor's nest today, but found the water too high (from Monday's rains), and it was also densely cloudy & misting all day.

March 24

San Gabriel Expedition.

This forenoon came to mouth of Fish Canyon in the San Gabriel Wash 3 miles east of Duarte. Raining drenchingly all day, so made a "wet" camp. There is a large stream issuing from Fish Canyon, and the San Gabriel River is a huge rapid, so that we could go no further in any direction even if we wanted to. In spite of the rain a few birds are to be seen — a flock of violet-green swallows twittering high up in the fog; a dusky hermit thrush calling (good weather for him!) — few audubon Warblers, & a Ringlet (ashy) in full song.

March 25.

7500 Black-tailed Gnatcatcher ♂

7501 Bush-tit ♂

7502 Rufous-crowned Sparrow ♂

Rained most of the night and this morning, partially clearing in the afternoon enough to dry things out. Saw following birds:- Cassin Vireo (1 at very close range, so that identity was certain); Calif. Shrike (1); Linnet (few); Poor-will (2 at dusk, one flitting about flowering branches at top of eucalyptus, catching insects attracted to flowers); Western Flycatcher (1 shot by Taylor); Intescent Warbler (several); Audubon Warbler (most abundant bird in mouth); San Diego Wren (few); Parkman Wren (several in full song); Canyon Wren (several in full song); Rock Wren (1); Cactus Wren (a pair); Bush tit (several); Pasadena Thrasher (1 singing); Black-tailed Gnatcatcher (1); Western Gnatcatcher (common); Turkey Vulture (three flocks circling overhead); Sparrow-hawk (1); Dwarf Hermit Thrush (few); Black Phoebe (pair); Wren-tit (common)

March 26

Rained hard all night and this morning, so that everything is soaked. Now (11 a.m.) clearing up with a west wind. The boys put out about 100 traps last night and took the following within half a mile of camp:

Peromyscus jumbelli (commonest mammal, about 15 taken); Peromyscus fraterculus (3 taken); Peromyscus californicus insignis (1 taken); Reithrodontomys longicauda (5 taken); Perodipus agilis (1 taken); Perognathus californicus dispar (3 taken); Neotoma fuscipes macrotis (1 taken); Spilogale phenax (1 taken); Lepus americanus (1 trapped and 1 shot); Lepus audubonii (several shot).

Heard a black-chinned sparrow sing several times this morning; also several rufous-crowned sparrows (song of this bird very much like that of Lazuli nunting, tho a little less loud + less accented); found a cactus wren's nest 2 feet up in opuntia cactus, with 3 small young.

1666 Perognathus c. dispar ♂
1667 Peromyscus fraterculus ♀
7503 Western Gnatcatcher ♀
7504 Wren-Tit ♂
1668 Scapanus californicus ♂ (Posadena, Mar. 25)

March 27

7505 Allen Hummer ♀ (Glendora)
7506 Western Vesper Sparrow ♀ "
7507 Lawrence's Goldfinch ♂ "
7508 House finch ♂
7509 Red-shafted Flicker ♀

Went down to the S.P. railroad bridge, crossing that & the eastward. In the wash saw several cactus wrens, black-tailed Gnatcatcher, shrike, mockingbird, Turkey Vulture, Golden-crowned Sparrow, Intermediate Sparrow, etc.

March 28

7510 Rufous-crowned Sparrow ♀
7511 " " " ♀
7512 Least Vireo ♂
7513 " " ♂
1669 Peromyscus fraterculus ♂

Several Least Vireos and Ariz. Hooded Orioles have appeared around camps. The weather is becoming clear and very warm so that bird-life is more in evidence. Large flocks of White Pelicans are often seen circling up over the mountains.

March 29

Among mammals, several ground squirrels have been taken, jack rabbits seen, and many more Perognathus; Peromyscus gambeli, fraterculus & eremicus; Perodipus, Neotoma f. macrotis, Raithrodontomys, & one more Spilogale taken.

7514 Anthony Towhee ♂
7515 " " ♀
7516 " " ♂

March 30

Saw today Bullock Oriole (several); 1 black-headed grosbeak; 1 phainopepla; a flock of cedarbirds in pepper-trees near Azusa; Lawrence goldfinches in orange-trees; Arizona hooded oriole (nest & eggs); Townsend's warblers etc.; Nest. warbling Vireo (1).

517 Pasadena Thrasher ♀

518 Audubon Warbler ♂

519 " " ♀

March 31

7520 Bullock Oriole ♂

7521 House Finch ♂

7522 Tolmie Warbler ♂

7523 Dwarf Hermit Thrush ♂

This forenoon saw:- Pileolated Warbler (several); Tolmie Warbler (2 taken and at least three others seen); Black-throated Gray Warbler (1 taken); Bullock Orioles (common); Black-headed Grosbeak (several); Black-chinned Sparrow (1 singing); Western Lark Sparrow (pair on road).

End of Fish Creek Canyon Trip.

April 9

7524 Least Vireo ♂ Pasadena.

7525 Mockingbird ♂ "

April 12.

Saw two robins in peppertrees near Linda Vista Bridge this morning; one was singing vociferously; there has been one on the place almost continuously up to within a day or two. Yellow Warblers have arrived within two days & are common. Also Black-headed Grosbeak, Cliff Swallow, Bullock Oriole, Western Flycatcher, Least Vireo, one Cassin Vireo (in oaks by arroyo pumping horse); nest of Anna hummer under construction.

April 23

Saw, or rather heard, first Wood Pewee at 6:15 a.m.

1670 Putorius chrysogenys ♀ (Sent by W.B. Dowell from San Bernardino)

San Bernardino Mt. Trip #2.
June 9 - 1906

Came to Redlands this morning, 8:55 - 11.02. Then by stage up Mill Creek to Harvey's, where we are camped for the night. Arrived here at 2 P.M. and immediately began exploring the vicinity. There is in the Golden-rod and big cone spruce belt the streams lined with pine riders. There are also lots of sycamores mostly below here, but they are entirely without leaves, due (as Harvey says) to a late heavy sleet storm, which also ruined the apple & cherry crop here at the ranch. On exposed hillsides are lots of grease-wood, scrub oak, ceanothus, yerba Santa, etc. (= Upper Austral). The country is flower-decked, the late rains & fogs having retarded the season. Birds are common, the following species being in evidence. - Warbling Vireo (many in full song along the streams); Cassin Vireo (2 or 3 pairs about the ranch; one nest and 4 incubated eggs 12 feet up in alder near stream; another 4 feet up in

golden oak by trail); Calif. Yellow Warbler (very common); Audubon Warbler (nest with three incubated eggs 14 feet up in mistletoe clump about 2 feet out on alder branch near the stream and only about 100 feet from the dining room; Dixon slid down a rope to get the nest; the ♀ was sitting and the tail over the edge of the nest was sufficient identity, tho I finally shot it.); West. Wood Pewee (2 or 3); Ash-throated Flycatcher (2); Black-chin Hummer (a ♂ seen, and a nest 15 feet up on alder branch over stream near dining room, bird sitting); Western Bluebird (pair had a nest in hole in sycamore); Parkman Wren (common; nest with 4 eggs 7 feet up in hole in alder; another with young); Violet-green Swallow (many at dusk); Song Sparrow (several around the cienega below the ranch); Lazuli Bunting (many); Tanager (few); Western Gnatcatcher, Spurred and Anthony Towhees, Wren-tit, San Diego Wren, Rock Wren (several of each); Black Phoebe (pair by dining house).

June 10

Left Harvey's at 6 a.m. with horses + pack train + made up Mountain Home Creek (canyon) over the divide to 7-oaks; then on up the Santa Ana to the mouth of South Fork

where we pitched permanent camp at
2:30 PM Up Mountain Home Canyon
[illegible] first a dense growth of alder,
big cone spruce & golden oak. Here on
a golden oak [illegible] hanging 1' feet up
over the trail we took the second set of
Cassin Vireo 2-4. incubation perhaps ½
further up, no pine silver fir, black
oak and golden & Jeffrey pines become
numerous, the latter particularly around
Iron Mountain. There I saw several
California Woodpeckers, White-headed Wdpks,
Blue-fronted Jay, Cassin Purple Finch,
Mt. Chickadee, Sierra Juncos, Slender-billed
Nuthatch. A little lower in the Canyon
among the shady alders were many
Western Flycatchers, and in the golden oaks
up the sides of the Canyon several
Black-throated Gray Warblers. At
Mountain Home, we all saw very
unquestionably a sharp-shinned Hawk,
mobbed by blue-fronted Jays.

Here at South Fork Camp I found
& Dixon climbed late this evening, by
means of rope an Audubon Warbler's
nest. This was 25 feet up on a
lower branch of a yellow pine, about
5 feet out from the trunk; no branches
below. Set 2-4 incubated about ½.

7526 Audubon Warbler ♀ (with set 1/3, shot at Harvey's. June 9)

June 11

7527 Calliope Hummer ♀ (with set 2/2)

7528 " " ♀ (with set 1/2)

7529 Sierra Creeper ♀ (with set 1/5)

1671 Microtus ♀

Today went up Fish Creek canyon, collecting only in the lower portion. found two Gray Flycatchers' nests, one just completed & the other with one egg. Took two fresh sets of Sierra Creeper's eggs (1/5 2/4). One nest (1/5) 8 feet up behind loosened bark of incense cedar, composed basally of 1/4- to 1/2-inch strips of inside cedar bark, and internally of soft weathered inner willow-bark fibers, with a few feathers felted in. The bird was flushed as Dixon passed. The other set 2/4 was located 10 feet up behind loosened bark of small dead & rotten silver fir. A creeper was heard singing, but did not come around; this set possibly incomplete. This was where I found a family of nearly full-grown young last year; & we found the old nests (3 of them one above the other) behind a loosened strip of bark 8 feet up on a nearby cedar. Another creeper's nest was found about 8 feet up behind bark of a cedar & held three young & one infertile egg.

Two nests of Calliope Hummingbird were found each containing two eggs, fresh or nearly so. Both were discovered by watching the birds fly to them. One bird was purposely scaring an Audubon Warbler which ventured into the nest tree. One nest (½) was 25 feet up on a living drooping fir branch beneath quite dense foliage; the other (½) was 25 feet up on a dead branch of a sickly fir living near the top. Saw also in Fish Canyon, one Water Ouzel, one Western Red-tail, one Sierra Sapsucker, heard siskins and one Ashy Kinglet in full song. Dixon found a set of 1 Junco (4), slightly incubated; nest under a projecting rock on side of gully in Lost Creek canyon.

Found a Microtus nest under the end of a log only about 5 feet from the main stream in a clover border. The nest was globular of fine dried grass blades, and contained three newly born young, eyes still firmly closed, the 4th was not [illegible] was killed before the young were discovered; there was a conspicuous system of runways thru the clover on the slope down to the water's edge, but the mouse refused to run into the stream.

June 12

7530 Sierra Hermit Thrush ♀

7531 Pygmy Nuthatch ♂ (with set 7/7)

Today we followed up South Fork quite a ways possibly as high as 7500 feet and then, climbing the west bank, came back across the "flats". In the canyon found a Sierra Thrush's nest 6 feet up in a young incense cedar with 5 badly incubated eggs. The bird had left before we found the nest and we never saw her at all. The nest tree was on the floor of the canyon about 50 feet from the stream in a shaded bend. Another nest containing 4 newly-hatched young was 5 feet up in a very young fir growing 100 feet up on the side of the canyon. The bird was on the nest, and staid around, being inadvertently shot before the nest contents was determined. A Junco's nest (2/4) was taken from a cavity under a tuft of grass or sod, in a bank on the side of a trail, the bird being flushed from almost under my feet. Another Calliope Hummer's nest, with one large young, was climbed to, 40 feet up in a yellow pine, built as usual. On the flat to the west of South Fork, a slightly incubated set of 7 Pygmy Nuthatch's eggs was taken from a hole dug in a rotten pine stub 8 feet up; two blows with the hatchet on the stump brought

out the nest which disappeared. After a while what proved to be the ♂ made his appearance with a large insect in his bill, an evidence that the ♀ feeds the ♂ on the nest. The nest was a pelted mass of plant down & fur. Two Gray Flycatchers' nests were found just building. This afternoon Jim Dixon found a Robin's nest 6 feet up in a young cedar, with three newly-incubated eggs.

June 13

Today we went up onto the flats west of South Fork, & west down to the Santa Clara, & back up the latter to camp. Birds were not common on the flats. Saw one White-headed Wdpk, two Sparrow Hawks, W. Bluebirds' nests, one with 3 fresh eggs and others with young; Nut. Chickadee nest with 5 large young (parent was not in the least prevented from uttering unmuffled the usual "chickadee" by a mouthful of insects!); Red-shafted Flicker (1); Western Chipping Sparrow (several); Mountain Quail (1 pair). Down along the Santa Clara took a set (3/4) of Cassin Vireo 12 feet up in small incense cedar (♂ was singing volubly while on the nest!). also found a creeper's

nest 7 feet up behind bark in crook of huge incense cedar; young large enough to clamber up the trunk out of reach. Western Wood Pewee just building a nest. Dixon took a set of three fresh Tanager's eggs this evening in Tin Creek canyon from a nest 30 feet up, in a silver fir.

June 14-15

Went up thru So. Fork Ciemegas to Dry Lake and vicinity staying one night at the Lake, where there is yet a great deal of snow in drifts. Dixon took a set of four fresh eggs of Audubon Warbler from the nest at end of drooping Murray Pine limb 12 feet up. This species was common and in full song. I saw a ♀ carrying nesting material up into a tall Murray Pine. A set of 4 incubated eggs of Western Chipping Sparrow was taken from a typically built nest located 14 feet up in the tuft of needles towards the end of a Murray Pine branch. This species is common all the way from 7-oaks up to timber-line on Grayback. Took a set (15th) of 5 somewhat incubated eggs of Mountain Chickadees from an old woodpecker's hole 20 feet up in dead Murray Pine. Lots of other nests with young. Found a Williamson Sapsucker nest 20 feet up in dead murray Pine; a chorus of squeals indicated the contents.

Found also, 3 Gray Flycatcher nests, one

3 Olive-sided Flycatchers, and 2 of Cassin's Purple Finch. close around the lake, all in course of construction. A young Western Robin was around, well able to fly. two Western Red-tails, evidently after yellow-headed chipmunks. Several White-throated Swifts flying over lake, and in the evening Pacific Nighthawks with their usual notes. Also saw a Golden Eagle, which, alighting on a dead limb of a pine at margin of lake, snapped it off by its weight, and sent it crashing to the ground; Cabanis Woodpecker; lots of Pine Siskins, in full song and very active, but no signs of nests; I thought I heard flying over several times crossbills but failed to get conclusive evidence; Wood pewees were common; heard a few nuthatches as usual; Sierra Hermit Thrushes and Solitaires the latter circling in tremendous wings high over head, were both in full song, but I imagine nest only in the canyons far below; saw one Calliope Hummer, a few juncos, 1 Creeper, several pairs of Slender-billed Nuthatches (one nest with large young 18 feet up in woodpecker hole in dead pine); one or two green-tailed Towhees & Stephens Fox Sparrows in chaparral on mountain sides.

The afternoon of the 15th I went up from So. fork Cienga to Dollar Lake, southwestward. The Lake basin was half full of snow, & there were great drifts & slides all about. Saw thereabouts a few Fox Sparrows, Chickadees, Audubon Warblers, & Gray Flycatchers. Down thru the So. Fork (or "Big Horse") Ciengas saw: Lincoln Sparrows (in full song), Blue-fronted Jay, Sierra Hermit Thrush, Sierra Creeper, Western Bluebird (nests with young), Olive-sided flycatcher, Western Robin (fairly common, more so, I think, than last year), etc.

1672 ♀ Loxia curvirostra fusca ♂ } shot at So. Fork camp,
1673 " " ♂ } morning of 15th.

June 16. (Saturday)

Went up Fish Creek Canyon again this morning.

7532 Calliope Hummer ♀ (with set 3/2)
7533 Gray Flycatcher ♀ (with set 1/4)
7534 " ♀ (with set 2/4)

Calliope Hummer (set 3/2) I found on the canyon side beneath an overhanging boulder only 15 inches from its face where it sloped back at the back, and 22 inches from the ground directly beneath the nest. The latter was built on a drooping bunchlet of a young fir which darkly shaded it above (on the side not occupied by the rock). Incubation about 1/3. I took a set of Gray Flycatcher (1/4) fresh 5 feet up in crotch of dead willow stalk; and

another set (2/4), incubation advanced 2½ feet up — very young incense cedar growing on canyon side on opposite side of boulder from ~~the~~ Calliope's nest. Also took Cassin's Vireo (4/4) very fresh 2½ feet up on outer branch of cottonwood in Lost Creek Canyon; also (5/3), incubation well begun 8 feet up on end of Jeffrey pine branch over trail; also Western Warbling Vireo (4/3) fresh, nest 35 feet up at outer end of branch of incense cedar; both taken along Sweetwater.

June 17

Also took Gray Flycatcher (3/4), fresh, from small fir 2½ feet up growing in Lost Creek canyon bottom only 10 feet from stream. We also found a Calliope Hummer's nest 50 feet up on dead pine, with two eggs nearly hatched; and another hummer's nest 70 feet up in dead (wholly) fir, but unreachable.

June 23.

This afternoon, coming up Mountain Home Canyon, we found a Western Flycatcher's nest with 4 somewhat incubated eggs. It was 6 feet up supported against the trunk of a dead alder by an out-turned slab of bark in the usual style; being close by the trail the bird flushed as our horses passed.

June 24

At 7 oaks:- a linnet's nest on the end of a log over the front door of the "parlor" log cabin with eggs. Watched a Sierra sapsucker boring in branches of alder; working at same place for fully 1½ hrs.; then a Calif. Woodpecker which had been apparently watching all the while from a perch on a tall dead pine nearby flew down driving off the sapsucker, and going the rounds himself "sipping" at the borings!

Notes on Eggs Collected by Jim.

Gray Flycatcher

Set 4/4; Inc., slight; nest 4 feet up in Manzanita (A. patula) in Fish Canyon, 6600 ft.; nest when contained one egg a substantial affair as usual, but as set was deposited material was robbed from nest (presumably), until when set was full, the nest was a very flimsy affair. June 21.

Set 5/4; fresh (one egg sparsely spotted); June 23; by trail up South Fork, 7000 ft.; nest 10 ft. up in black oak against trunk supported by emanating branch.

Set 6/4; inc. advanced; Dry Lake, 9000 ft.; June 23; nest 12 feet up up in Murray pine resting on two limbs where they happened to cross; with 7

Set 7/4; Inc. well begun; Dry Lake, 9000 ft.; June 23; nest 15 ft. up in Murray Pine on top of thick bunch of needles and small limbs.

Set 8/3; fresh; Dry Lake. June 26; nest 6 ft. up at end of drooping branch of Murray Pine; with ♀

Cassin Purple Finch

Set 1/4; Inc. advanced; Dry Lake, June 23; nest 50 ft. up on end of limb of Murray pine.

Set 2/4; fresh (just 8 days before this nest was just barely begun); Dry Lake, June 23; nest 15 feet up on bushy end of limb of Murray Pine; both ♂ + ♀ taken & preserved.

Set 3/4; Inc. far advanced; ♀ shot; Dry Lake, June 26; nest 45 feet up at tip of limb near top of Murray pine (only about 50 feet - next tree - to 2/3).

Williamson Sapsucker

One rotten egg taken from hole 20 feet up in "Cal." dead Murray Pine, with 5 2/3-grown young; Dry Lake, June 26.

Olive-sided Flycatcher

Set 1/3; Inc. well begun; Dry Lake, 9:00 A.M.; June 23; ♀ with set; nest on drooping limb of Murray Pine 20 feet up and over steep bank of creek: parent seen scrapping with purple finches in vicinity 8 days before & so nest discovered.

Sierra Junco

Set 3/4, Inc. commenced; So. Fork Cienega 8000 ft. June 23; nest in a bunch of grass close to trail in meadow; found building 8 days before.

Cassin Vireo

Set 4/4 c; Fish Creek 6600 ft. June 18; fresh; nest 10 ft. up in pine sapling.

Warbling Vireo

Set 3/3, Inc. advanced; Santa Ana 6000ft.; June 22; 20 feet up at end of drooping branch of balm-o'-gilead.

Set 3/4. Inc. advanced; Santa Ana 6200ft.; June 20; nest 20 ft up on perpendicular branch of cottonwood (= "balm-o'-gilead").

Set 4/4, Inc. very slight; Santa Ana 6000ft; June 20; nest 20 ft up at end of small cottonwood limb.

Set 5/4, Inc. advanced; Santa Ana 6300 ft.; June 25; nest 20 feet up in cottonwood.

Western Wood Pewee

Set 1/3, Inc. slight; Santa Ana 5800 ft.; June 18; nest 12 ft. up on pine limb over road.

Set 2/3, Inc. slight; Fish Creek 6500ft.; June 18; nest 15 feet up on top of cedar limb.

Set 3/3, Inc. slight; Santa Ana 6300ft.; June 24; nest 15 feet up near end of small pine limb near creek.

Townsend Solitaire

Set 3/4, Inc. advanced; Santa Ana, 6000ft.; June 22; Nest on dirt bank and held in place by tangle of roots; made of sticks twigs & bark, lining of fine dry grasses; close to stream; so fragile as to fall to pieces when picked up.

Set 4/4 Inc. fresh; Santa Ana, 6400 ft.; June 24; nest beside a young fir and protected by an overhanging rock; on steep hillside; made outwardly of stick & twigs, lined with dry grass; straggling down.

7535 Olive-sided Flycatcher ♀ (with set 1/3) Dry Lake June 23

7536 Gray Flycatcher ♀ (with set 6/4) " " "

7537 Cassin Purple Finch ♀ (with set 2/4) " " "

7538 " " " ♂ " " " " " "

1674 Vespertilio ♂ So. Fork, 6200 ft.; June 24.

June 25

7539 Sierra Hermit Thrush ♀ (with set 3/4) So. Fork, 6300 ft.

This evening about a quarter of a mile up South Fork found a Sierra Hermit Thrush nest & took the ♀ parent; the four eggs were incubated perhaps one-third; the bird was sitting & almost touched before she left the nest; nest 3 feet up in inter-crossing branches of young pine & young fir which grew about 10 inches apart; in canyon bottom 50 feet from stream, shaded by alders.

June 26

7540 Gray Flycatcher ♀ (with set 5/3) Dry Lake, 9000 ft.

7541 Cassin Purple Finch ♀ (with set 3/4) " " "

June 29

7542 Sierra Creeper ♀ Fish Cr. - 6600 ft.

7543 Cassin Vireo ♀ " " 6500 ft. (with set 7/4)

7544 " " ♂ " " " " " "

7545 Sierra Hermit Thrush ♂ jr. " " 6600 ft.

7546 Am. Dipper ♀ jr. Santa Ana - 6400 ft.

7547 Cabanis Woodpecker ♀ " " 6200 ft.

June 30

7548 Calliope Hummer ♀ Fish Cr 6700 ft. (with set 5/2)

1675 Eutamias merriami ♂ " " "

1676 Peromyscus gambeli ♂ So. Fork 6200 ft.

1677 " " ♀ " " "

July 1

1678	Vespertilio fuscus	♂	South Fork - 6200 ft.
1679	Peromyscus gambeli	♀	" " "
1680	" "	♂	" " "
1681	" "	♂	" " "

July 2

7549	Pacific Nighthawk	♀	" " "
1682	Vespertilio fuscus	♂	" " "
1683	Eutamias speciosus	♀ jv.	Fish Creek, 8000 ft.

Egg Data.

Cassin Vireo, June 29.

Set 7/4c (with both parents), fresh; ♀ sitting; nest 12 feet up in lower outer foliage of cedar growing among firs at mouth of Fish Cr.

Gray Flycatcher, July 3.

Set 2/3, fresh, (with ♀): nest 40 feet up on 8-inch limb of large cedar at mouth of Fish Cr., in woods of pine, cedar & fir. nest wedged down against supporting limb and upright main trunk, material being fastened to the loose cedar bark of both, ♀ sitting until I nearly reached her although tree was jarred repeatedly as I climbed up.

Set 10/2, inc. advanced (with ♀); nest 6 feet up on horizontal branch of cottonwood also Fish Cr., 6500 ft.; where two other upright smaller limbs emanated; rattlesnake coiled beneath, but ♀ sitting closely; this nest held 3 eggs on June 29, but one must have been destroyed since, tho no shell remains beneath where I looked carefully.

Calliope Hummer – Fish Cr., 6700 ft.

Set 4/2, June 28; inc. far advanced; nest 12 feet up in dead silk tassel tree, 6800 ft., Fish Cr.

Set 3/2, June 30, with 7, inc. advanced; nest 20 feet up in horizontal dead branch growing downwards towards live limb of alder 20 feet from stream & well-shaded.

July 3.

7550 California Yellow Warbler ♂ So. Fork, 6200 ft.
1684 Myiotis ♀ (Embr.) " " "
1685 Peromyscus gambeli ♀ " " "
7551 Gray Flycatcher ♀ (with set 3/3) Fish Cr., 6500 ft
7552. " " ♀ (" " 10/2) " " " "
1686 Peromyscus gambeli ♂ So. Fork, 6200 ft.

July 4

1687 Peromyscus gambeli ♂ " " "
7553 Pacific Nighthawk ♀ " " "
7554 Green-tailed Towhee ♀

The oesophagus of the Nighthawk contained 43 winged white-ants, many of them yet alive 15 hrs. later. The towhee was caught in a mouse-trap baited with rolled oats.
1688 Peromyscus gambeli ♂ So. Fork, 6200 ft.

July 5

1689 Peromyscus boylei ♂ " " "

Here at the South Fork camp a black phoebe made its appearance this morning with its familiar notes and mien. A flock of bush-tits are often to be seen in the willows nearby, and I saw a deserted nest halfway down the

Santa Ana between here and Forks. Several California yellow warblers have been heard in the willows + cottonwoods here; also one or two spurred towhees right at the mouth of the So. Fork R. We went up to a cienega on the south face of Sugarloaf, about 6700 ft. alt., this morning, and heard in the belt of pinyon, golden + scrub oak which extends across the hottest slope a wrentit, and a Black-chinned Sparrow. In the cienega, a pair of sparrow hawks were feeding their family of noisy young marooned so fast up in an old flicker hole rotted out in a pine stub, with grasshoppers caught on the meadow. Families of full-grown Pygmy nuthatches, Mountain chickadees, and Western Bluebirds were seen in the vicinity; also one mourning dove. In the evening several nighthawks (pacificus), came down to hunt insects along the Santa Ana. Violet-green swallows are seen flying as late in the evening as they can be distinguished in the gloom, a refutation of the contention that swallows in general go to roost at sun-down. Several pairs of Green-tailed Towhees evidently have nests of young in the rose thickets of the near vicinity. Last night at dusk I saw what I was quite sure was a Sharp-shinned hawk.(?) Have heard and seen a dusky poor-will.

7555 Western Bluebird ♂ So. Fork, 6200 ft.

July 6

1691 Pipilo maculatus ♂ " " "

1671 " oregonus ♂ " " "

1692 Eutamias merriami ♂ Santa Ana, 5700 ft.

7556 Mountain Quail juv. " " "

7557 " " " " " " "

1693 Pipilo maculatus ♂ So. Fork, 6200 ft.

1694 " " ♂ " " "

7558 Black Phoebe ♂ jv. Seven Oaks, 5100 ft.

7559 Lazuli Bunting ♂ Santa Ana, 5500 ft.

Went down to 7-oaks and back this afternoon. Thunder-stormy muggy weather. In the near vicinity of 7-oaks, or within 2 miles this side saw following birds:- Black-Phoebe (a full-grown juvenal); Song Sparrow (several along stream up nearly to "Louie's"); Lazuli Bunting, Spurred Towhee, Western Bluebird, Western Wood-Pewee, Western Chipping Sparrow, Western Tanager, Violet-green Swallow, Mountain Chickadee (all common); Western Flycatcher, Bush-tit, Audubon Warbler (1); Black-throated Gray Warbler, Nuttall Woodpecker; Cooper Hawk (1); Wren-tit (a heard); Black-chinned Sparrow (heard); Ash-throated Flycatcher (2); Calif. Yellow Warbler (several). Along the trail further this way, met a family of newly-hatched young Mt. Quail. Since the rains, fresh mole-working, are

appearing everywhere, even up among the rocks on the hillsides, attesting to the unexpected relative abundance of these animals.

July 7

7560 Pacific NighthawK ♂ So. ForK, 6200 ft.

July 8

1695 Perognathus ♀ .. ..

1696 Peromyscus boylei ♀ .. ..

1697 .. .. ♂ .. ..

1698 .. .. ♀ .. ..

1699 .. gambeli ♂ .. ..

1700 .. .. ♂ .. ..

1701 .. .. ♂ .. ..

7561 Pacific NighthawK ♀ .. ..

7562 Cooper HawK ♀ .. ..

July 9

1702 Peromyscus boylei ♂ .. ..

1703 .. gambeli ♂ .. ..

1704 .. .. ♀ .. ..

1705 Myotis lucifugus longicrus ♀ .. ..

7563 Green-backed Goldfinch ♀ (with set 1/4) .. .. 6400 ..

1706 Peromyscus gambeli ♀ .. .. 6200 ..

7564 Audubon Warbler ♂ .. ..

7565 .. .. ♂ .. ..

7566 Western Tanager ♂ .. ..

Found a Green-backed Goldfinch's nest up on the "bench" (So. ForK, 6400 ft.) with 4 fresh eggs. Taken with ♀ parent, ♂ too shy to secure; nest 9 feet up ensconced in a cluster of upright

twigs of black oak, in the typical black-oak belt (and yellow-pines); I have seen but two or three Green-backed Goldfinches this far up. this down to 7-oaks they are fairly numerous. the Lawrence Goldfinch is common. Townsends, and a good many siskins are to be heard. The Cooper Hawk was shot with half a ground squirrel (C. beecheyi) in its claws. There was evidently a nest or brood of young nearby. I now think that it was likely a small ♀ cooper hawk I saw when I thought I saw a sharp-shinned hawk, as this was close to the same place, and I have seen undoubted Coopers fly by several times in that direction. Saw the first young Audubon Warblers on the wing yesterday (8th), but still being fed by the parents, with noisy teasings. Found a Gray Flycatcher's nest 44 inches up in the upright forks of a small black-oak on a canyon side near this camp; contained 4 eggs with incubation apparently nearing completion (not taken); the nest was rather small but very firm, evidently having been compacted by the rains.

July 10

Fish Cr. 6700 ft.
So. Fork 6200 ft.

7567 Sierra Creeper ♀
1707 Peromyscus gambeli ♂
1708 " " ♂
1709 Neotoma ♂ jr.

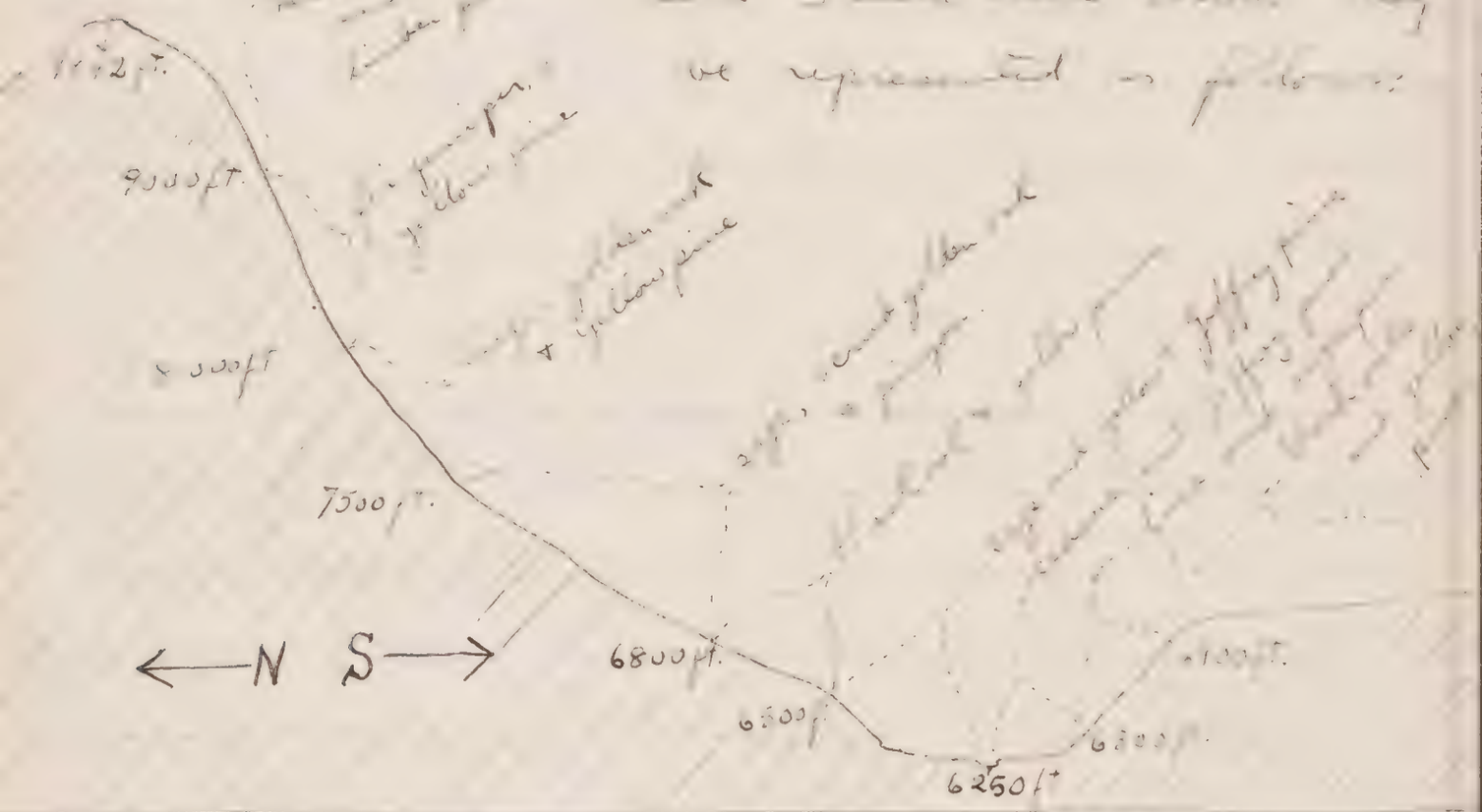
Went up Fish Creek Canyon this forenoon as far as the "quaking aspen" groves, about 7400 ft. alt. Found a Gray Flycatcher's nest with 2 small young 3 feet up in a small silk-tassel bush; and another only 2 feet up in a small incense cedar, itself 5 feet high, with 4 badly-incubated eggs. Both these nests were very firm almost like papier maché, evidently due to having been compressed by being wet, their dimensions were also less than with the earlier nests, that is with probably on an average the same bulk of material, they were not so fluffy. Full-grown young were seen of Sierra Hermit Thrush (also a ♂ heard in full song), Sierra Creeper, and Sierra Junco.

July 11.

1710	Peromyscus gambeli	♂	So. Fork, 6200 ft.	
1711	" boylei	♂	" " "	
1712	" "	♀	" " "	
1713	Neotoma	♂ jv.	" " "	
1714	Lepus	♂ *	Sugarloaf, 6700	"
1715	"	♂ jv.	" "	"
7568	Mountain Quail	♀ jv.	" "	"
7569	Brewer Sparrow	♂ ad.	" 7500	"
7570	" "	♂ im.	" "	"
7571	Rock Wren	♂ im.	" 9000	"
7572	Mountain Chickadee	♂ im.	" "	"

* This rabbit measured 28½ inches from end of nose to tip of ear when lying up.

[illegible] up Sycamore Canyon and back this forenoon, 6:45 to 11:45. The south slope has a pinyon & sage belt across it above a black oak-and-yellow pine belt; above the former is a golden oak belt which merges [illegible] & fir [illegible], [illegible] & timberline pines and firs, [illegible] and a mixture of limber and bristle cone pines. A profile view of [illegible] is shown below [illegible] as represented on [illegible]:



Characteristic birds were:- Sage belt (6000 - 7000 ft) Black-throated & Brewer Sparrow; Golden oak (7500 - 8000 ft) Black-throated Gray Warbler & Wren-tit; etc. as usual. On summit - two golden eagles, several cathirdes, rock wrens (in rock piles); mountain chickadee, Western Bluebird, Hairy Downy White headed Woodpecker (at about 9000 feet); Audubon Warbler, Green-tailed Towhee (up to 9000 ft) College [illegible] (up to 10,000 ft); Rufous Hummer (one ♂, but plainly seen, at castillejas, among pines & firs at about 9000 ft.).

July 12

7716 Peromyscus gambeli ♂ So. Fork - 6200 ft.
1717 Perognathus ♀ jv. .. .. .
7573 Western Bluebird ♂ .. .. .

July 13

7574 Lazuli Bunting ♀ .. .. .

July 14

1718 Peromyscus gambeli ♂ .. .. .
1719 .. .. ♂ .. .. .
1720 .. .. boylei ♀ .. .. .
7575 Lawrence Goldfinch ♂ jv. .. .. .
7576 .. .. ♂ jv. .. .. .
7577 Mountain Chickadee ♀ jv. .. .. .
7578 Western Warbling Vireo ♀ .. .. .
7579 Western Wood Pewee ♂ .. .. .
7580 Calif. Purple Finch ♀ .. .. .
7581 Sierra Junco ♀ jv. Post Creek, 6700 ft.
7582 Gray Flycatcher ♀ (with set 4/4) .. .. 6500 ..

Found a set (4/4) Gray Flycatchers, incubation advanced, at about 6500 ft. altitude in Post Creek Canyon, the ♀ being secured; nest 10 feet up on horizontal branch of blackoak growing on canyon side, and profusely supported by numbers of small dead and living twigs given off upwards from the main branch (about 2 inches in diameter) and drooping down past the rim from the next branch above; The nest was still wet and sodden from yesterday's

heavy rain and thunder & compressed in consequence; the eggs are discolored beyond washing and this staining, evidently acquired from contact with the wet nest-material. It is a wonder to me how small birds & nests could escape yesterday's violent hail storm when hailstones "as big as moth-balls," certainly larger than the flycatchers eggs, fell thickly for many minutes; and yet birds seem to be as abundant and singative as ever this morning. Found another Gray flycatchers nest near the Santa Ana at mouth of Lost Creek, about 6400 feet; this was 10 feet up saddled in large crotch of a cottonwood and held two small young. Today near on South Fork camp Fork two full-grown juvenal Lawrence Goldfinches, the first I have ever seen. Both were males, and each showed one or two black feathers, one on forehead and the other in the chin. These seemed to be advance feathers of the first annual plumage, for new feathers were appearing in other tracts also.

July 15

Went up to Dry Lake, 9000 - 9300 ft. alt., this forenoon, 6:45 to 10:7, and collected around there staying all night. Snow still lay in deep ravines leading up towards

Longpeak. Lake full and running over as it usually is in early June. Sheet storm on afternoon whitened higher ridges. On the various furrowed roads there flat continent of Dry Lake 7,500 ft alt., I at last secured the identity of the crossbills. I am sure I saw the same species I saw & heard flying overhead a month ago in the same place, and perhaps also last year thinking them Cassin Purple Finches or Siskins (!!); but the crossbill notes are characteristic and unmistakable, loud calls or chirps of an peculiar tone, and rapidly repeated, & flight like / notes when flying. I saw at least 8 all told, several together in one tree but presently scattered out in pairs, apparently the bright red males showing solicitude when a ♀ was shot. They were feeding on green (year-old) cones in the tops of limber pines (Pinus flexilis), being still and hard to distinguish from the cones when working on them. The three secured were adults, but I thought I saw streaked juvenals as well. We heard some two young fledged Cassin Purple Finches whose relatively soft low-calls differed at intervals suggested much larger birds. Sierra Hermit Thrushes were yet in full song, but not easily, tho a many fledgling were juveniles. Audubon Warblers, adults only seen, were carrying insects, indicating broods of young. About the margin of Dry Lake

was a pair of Spotted Sandpipers which kept flying [illegible] the whole [illegible] appeared [illegible] usual wide semicircle. The one taken was shot as it flew out in this way, and we had to wait till the slight breeze drifted it ashore. Other birds of Dry Lake were:- Western Robin (♂ in full song at last rays of setting sun, and as soon as it was light enough to see distinctly in the morning); Gray Flycatcher, Red-shafted Flicker (1); Calaveras Woodpecker (1); Pygmy and Slender-billed Nuthatches, Western Chipping Sparrow and Sierra Juncos (full-grown young of these two), Western Bluebird, Solitaire (heard singing, and an empty nest found in the ravine entering Dry Lake from the Graybacks side; this nest was under a projecting rock in the shelving bank about 12 feet above the bed of the ravine); Sierra Creeper, Pine Siskin; Williamson Sapsucker (only 2 seen, and 2 more heard).

7583 Spotted Sandpiper ♂ im. Dry Lake, 9000 ft.
7584 Cross-bill ♀ " " 9200 ft.
7585 " ♂ " "
7586 " ♂ " "
7587 Gray Flycatcher ♂ " "
7588 Sierra Hermit Thrush ♂ juv. " "
7589 Cassin Purple Finch ♀ juv " "
7590 Audubon Warbler ♂ " "
7591 Williamson Sapsucker ♀ " "

July 16

Left camp at Dry Lake at 4:15 this morning and reached summit of San Gorgonio Peak (Haystack) at 7:10, returning and reaching camp at 9:00; then back down the south fork trail leaving base camp on the Santa Ana (mouth of South Fork) at 11:50. The snow is pretty well off Haystack now save for drift on the east sides of ridge crests and in the more extensive slides. Before we left widely boiling masses of vapor (?) began to form (also on San Jacinto across San Gorgonio Pass) and by 10:30 as we looked back from our homeward trail a heavy thunder-storm was raging about the summit of Haystack saw birds as follows:- about the edges of the snow patches there were fully 20 California Horned Larks in flocks of 6 or 8, or just pairs. The one taken was an adult, but I thought I also saw full-sized juveniles. These could not possibly have bred there, & must have wandered up from the plainly-to-be-seen fields in the vicinity of Beaumont and Banning, or from Bear Valley to the north across the Santa Ana. Rock Wrens were fairly common among the boulders, as usual.

Several parties of full-grown juvenal Sierra Juncos with adults, were about the rocks at the very summit and in most foreward up recently. Several Audubon Warblers and Nutcrackers were seen at the uppermost flattened out dwarf limber pine bunches on the north slope. The notes of the latter were heard from the cairn at the very summit

7592 Rock Wren ♀jv. Grayback, 11000 ft.
7593 Sierra Junco ♂jv. " 11500 ft.
7594 California Horned Lark ♂ " "
7595 Audubon Warbler ♀jv. So. Fork, 6200 ft.

This afternoon about 4 o'clock Hilda & I saw two Black Swifts beating down the Santa Ana westward against the wind. Large size and uniformly black color, glancing silvery in certain positions of the wings, makes identification certain.

July 17

Hilda saw another Black Swift this afternoon. Within the past week the region is being invaded by a number of birds which I am quite sure nested further down the Santa Ana, possibly in the Pacific foothills and valleys. Of these Parkman Wrens are very noticeable, and I saw one as high as So. Fork Cienga, 8500 ft, on the 15th. Black Phoebes are very often seen now, full-grown juveniles, all along the valley of the

Santa Ana. I saw them very commonly about 7 oaks this afternoon in my trip down for grub. Have seen three or four here at So. Fork Camps. Several Red-shafted Flickers have been noted lately in this vicinity; also Rufous Hummers (or possibly alleni), tho these are of course migrants from much further north. Most of the breeding birds are feeding full fledged young now, and bird-life in consequence seems more abundant, as it most certainly is, than it was in June. The population has at least doubled, surely.

July 18

The abundance of rattlesnakes is unusual, tho they are mostly small, about two feet (one 22 inches and another 24 inches, by actual measurement). They seem to haunt the willow clumps in the canyon bottoms especially. We found one in the act of swallowing, in this case about half-completed, an adult meadow-mouse (Microtus). Another contained an entire full-grown gopher (Thomomys). The rattles number from 3 to 9. The only other snakes seen hereabouts is a very common garter-snake (Thamnophis elegans?). These are

found up on the dry sage-covered canyon sides a good ½ of a mile from water or well or along the creek and in the cienegas. Sagebrush canyons 7-8 feet south slopes seems especially well populated with them. We have seen at least 5 blue-tailed skinks (Eumeces skiltonianus), which appeared just after rains mostly, and are always in the search for cover. Two horned toads (Phrynosoma blainvillii) have been seen here; they are more common down towards Tonopah. Uta stansburyiana is not very common this far up. But Sceloporus is abundant up to 8500 feet on southerly slopes. It is Hilda's conclusion that the salmon-pink sided individuals are an age or phase of the blue-throated + blue-sided S. occidentalis. For we have found apparent intermediate color steps.

July 19

Went up to Martin's at Big Meadows this morning. In the lower end of the meadow in a growth of tall grass & willows I heard the characteristic song of the Lincoln Sparrow. There were also Lazuli Buntings.

1721 Vesperlilio fuscus ♂ — So. Fork - 6200 ft.
7596 Western Warbling Vireo ♂ — " " "
7597 Western Bluebird ♂ — " " "

July 20

1722	Peromyscus boylei	♀	So. Fork, 6200 ft.
1723	" "	♂	" " "
1724	" "	♀	" " "
1725	" "	♂	" " "
1726	" "	♀	" " "
7598	Western Warbling Vireo	♀ jv.	" " "
7599	Sierra Junco	♂	" " 6400 ft.
7600	Western Bluebird	♂	" " "
7601	Mountain Chickadee	♂	" " "
7602	" "	♀	" " "
7603	Western Chipping Sparrow	♂ jv.	" " "
7604	" " "	♂ jv.	" " "
7605	Ash-throated Flycatcher	♂	" " "
7606	California Purple Finch	♂	" " 6300 ft.
1727	Peromyscus gambeli	♂	" " 6200 ft.
7607	Calliope Hummer	♀ jv.	Santa Ana, 6100 ft.
7608	Western Robin	♂	" " "
7609	Sierra Junco	♀	" " "
7610	Cassin Purple Finch	♀ jv.	" " "
7611	" " "	♂ jv.	" " "

The taking of two California Purple Finches confirms my suspicions that this species occurs on the Pacific side of these mts., tho at a lower level than the Cassin. I saw a ♂ of the former at Snyder's ranch below 7-oaks on June 18, and on July 6 and 17 I saw several young in the willows just above 7-oaks. The ♂ shot today was feeding alone on the ground near the mouth of South Fork.

July 21

1728	Perognathus	♂	So. Fork, 6200 ft.
1729	Peromyscus boylei	♂	" " "
1730	" "	♂	" " "
1731	"	♀	"
1732	" "	♂	" "
1733	" "	♀	

July 22

1734	Peromyscus gambeli	♀	" " " "
1735	" boylei	♂	" " " "
1736	" "	♂	" " " "
1737	" "	♀	" " " "
7612	Mountain Quail	♂ jv.	Sugarloaf Cienega, 6600 ft
7613	" "	♂ jv	" " "
7614	" "	♂ jv.	" " " "
7615	Cassin Purple Finch	♂	So. Fork, 6200 ft
7616	Green-tailed Towhee	♂ im.	" " "
7617	Gray Flycatcher	♂	Fish Cr, 6800 ft.
7618	" "	♂ jv.	" " " "
7619	" "	♀ jv.	" " " "

July 23

1738	Perognathus	♀ jv.	So. Fork, 6200 ft
1739	Peromyscus boylei	♂	" " "
1740	" "	♂	" " " "
1741	" "	♀	" " "
1742	Peromyscus gambeli	♂	" " "
1743	" "	♂	" " " "
7620	Sierra Junco	♂ jv.	" " " "
7621	Cassin's Vireo	♂	" "

7622 Lazuli Bunting. ♂ jv. So. Fork, 6200 ft.

7623 " " ♂ " " " "

July 24.

11 a.m. — Have just been up the South Fork trail to the lower end of the big Ciénega, about 7800 feet I suppose. Thunder storm began to gather by 9, and by 10 it was raining hard, and is yet. Allen (+ Rufous ?) Hummers are common and very noisy about the patches of scarlet Pentstemon barbatus. A large company of young Violet-green Swallows had collected on the barren upper branches of a dead pine, every now and then making spasmodic rushes out among the trees with loud twitterings, & soon returning scatteringly. These are the first young I have seen on the wing. Full-grown Green-tailed Towhees are common about the Ceanothus undulatus patches. The one I took on the 22nd was even in the moult into the 1st annual plumage. I saw two adult Fox Sparrows, but no young. A company of wandering Black-throated Gray Warblers mostly if not all birds of the year in the Black oak belt, about 7000 feet, show the migratory wave to be beginning. The one taken had almost completed the moult from the juvenal to the 1st annual. Many young Audubon Warblers are foraging

independently. A large Golden Eagle was flushed from a dead pine, and two females of Spruce Grouse were noted. Several Nutcrackers were seen and heard, and a song of my small Mountain Quail inspired. A Cassin's Vireo in full fall plumage (1st) was feeding with a bunch of young Chipping Sparrows in a deciduous patch. Many Audubon's Warblers were heard, one in broken song. The general Williamson's Sapsucker was quietly clambering up a pine, I was mistaken for a Cabanis Woodpecker, several of which were heard in the vicinity. 3 or 4 Red-shafted Flickers were flushed from around Clean rush-patches. Almost the only birds in the Ciénega were Sierra Juncos, full-grown young of which are now common. Two adult male Tanagers were noted. Wood Pewees, Gray and Olive-sided Flycatchers were noted as usual. Saw one full-plumaged (fall) Townsend Warbler in the Brush. Saw also Calliope Hummer, Western Bluebird, Spurred Towhee (one on edge of South east-facing slope of Canyon - Blue pines & yellow oaks grow), Plain and Slender-billed Nuthatches, Sierra Creeper,

Blue-fronted Jay, Mountain Chickadee, Mourning Dove (a pair in the black-oak belt & about 7000 ft.), Pine Siskin; — in all 32 species.

1744	Euthamias speciosus	♀	So. Fork, 7800 ft.
1745	" "	♂	" "
1746	" "	♂	" "
7624	Black-throated Gray Warbler	♂ im.	" 7000 ft.
7625	Calliope Hummer	♀	" "
7626	Cassin Vireo	♂ im.	" 7800 ft.
7627	Stephens Fox Sparrow	♂	" "
7628	Williamson Sapsucker	♀ jv.	" 7000 ft.
7629	Cassin Purple Finch	♂ jv.	" "
7630	" " "	♀ jv.	" "

July 25

1747	Peromyscus boylei	♀	" 6200 ft.
1748	" "	♀	" "
1749	" "	♂	" "
1750	" "	♂	" "
7631	Western Tanager	♂	Santa Ana, 6700 ft.
7632	Black-headed Grosbeak	♂	" "
7633	Sierra Junco	♂	" "
7634	Mountain Quail	♂ jv.	" "
7635	House Finch	♀ im.	" "
7636	" "	♂ jv.	" "
1751	Peromyscus boylei	♂	So. Fork, 6200 ft.
7637	Pine Siskin	♂	Santa Ana, 6700 ft.
7638	Audubon Warbler	♂ jv.	" "
7639	Slender-billed Nuthatch	♂ jv.	" "
7640	" "	♂ jv.	" "

July 25 (continued)

7641	Parkman Wren ♂ jv.	Santa Ana, 6700 ft
7642	" " ♀ im.	" " "
7643	Pygmy Nuthatch ♂ jv.	" " "
1752	Vesperticlo fuscus ♂	So. Fork, 6200 ft

July 26

7644	Western Robin ♂	" " "
7645	Cassin Purple Finch ♂	" " "
1753	Peromyscus boylei ♂	" " "
1754	" " ♂	" " "
7646	Allen(?) Hummer ♀	" " "
1755	Peromyscus boylei ♂	" " "
1756	" " ♀	" " "
1757	" " ♀	" " "
7647	allen(?) Hummer ♂ im.	" " "
7648	" " ♀ im.	" " "
7649	Parkman Wren ♂ jv.	" " "
7650	Slender-billed Nuthatch ♂ im.	" " "

July 27

1758	Peromyscus boylei ♀	" " "
1759	" " ♀	" " "
1760	" " ♂	" " "
1761	" " ♀	" " "

July 28

1762	" " ♀	" " "
1763	" " ♀	" " "
1764	" " ♀	" " "
1765	" gambeli ♀	" " "
1766	" " ♂	" " "
1767	" " ♂	" " "

7651 Spurred Towhee ♂ So. Fork, 6200 ft.

July 29

1768 Eutamias merriami ♀ " " " "
1769 Peromyscus boylei ♀ " " " "
1770 " " ♂ " " " "
1771 " " ♀ " " " "
7652 Audubon Warbler ♂ " " 6800 ft.
7653 Western Chipping Sparrow ♂ " "
7654 Sierra Hermit Thrush ♂ " " 7500 "
7655 Gray Flycatcher ♀ " " " "
7656 " " ♀ jv. " "
7657 " " ♀ jv. " " " "
7658 " " ♂ jv. " " " "
1772 Eutamias speciosus ♂ " " " "
1773 " " ♀ " " " "
1774 " " ♂ " " "
7659 Gray Flycatcher ♂ jv. " " " "

July 30.

1775 Peromyscus boylei ♀ " " 6200 ft.
1776 " " ♀ " " " "
1777 " gambeli ♂ " " " "
1778 " " ♀ " " " "

Yesterday Hilda + I went up the So. Fork trail to the ~~lower~~ end of the big Cienga, + then struck down into the canyon following the So. Fork back down to camp. Birds are mostly quiet now, with a preponderance of youngsters which are most conspicuous in their activity + most liable to be shot.

Bands of Violet-green Swallows were met with at the upper edge of the black oak belt, where also was seen a company of Bush-tits, undoubtedly wandered up from a much lower zone. Canyon Wrens are still numerous everywhere along the So. Fork we saw several Hermit Thrushes feeding in the shade, perhaps on the ripe strawberries. The one shot was an adult ♂ in dreadfully ragged plumage, some feathers of wings and lateral tracts just coming in.

July 31

7660	Cassin Vireo ♂ im.	So. Fork, 6200 ft.
7661	Western Bluebird ♂ jv.	" " "
7662	Black-chin Hummer ♂	" " "
1779	Peromyscus boylei ♂	" " "
1780	" gambeli ♂	" " "
1781	Eutamias merriami ♂	Lost Cr., 6500 ft.
7663	Calliope Hummer ♀ jv.	" " "
7664	Western Robin ♂ jv.	So. Fork, 6200 ft.
7665	Lazuli Bunting ♂ jv.	" " "
7666	Pileolated (Golden) Warbler ♀ im.	" " "
7667	Sierra Junco ♂? jv.	" " "
7668	" " ♀ jv.	" " "
7669	" " ♂ jv.	" " "
7670	" " ♀? jv.	" " "
7671	Sierra Creeper ♂	" " "
7672	[illegible]	" " "
7673	Lutescent Warbler ♀ im.	" " "

7674 Black-throated Gray Warbler ♂ im. Lost Cr., 6400 ft.

7675 " " " ♂ im " " " "

7676 " " " ♀ " " " "

7677 " " " ♀ "

7678 Mountain Chickadee ♀ jv. " " "

7679 " " ♀ jv " " "

August 1

7680 Cassin Vireo ♂ Santa Ana, 6000 ft.

7681 Sierra Junco ♀ jv. " " "

7682 " " ♀ jv. " " "

7683 " " ♂ j " " "

7684 Empidonax [illegible] ♀ " " "

7685 " canescens ♀ jv. " " "

7686 " " ♀ jv. " " "

7687 Rufous (?) Hummer ♀ " " "

7688 Green-tailed Towhee ♂ jv. " " "

7689 Cassin Purple Finch ♂ jv. " " "

7690 " " " ♂ im. " " "

7691 " " " ♀ jv. " " "

7692 " " " ♀ jv. " " "

7693 Green [illegible] ♂ jv. " "

7694 Lazuli Bunting ♂ jv. " " "

7695 Western Bluebird ♂ jv. " " "

7696 " " ♂ jv. " " "

7697 " " ♂ jv. " " "

7698 " " ♂ jv. " " "

7699 Western [illegible] Pewee ♀ jv. " " "

7700 Mountain Chickadee ♀ jv. " " "

7701 " " ♂ jv. " " "

7702 " " ♂ jv. " " "

7703 Slender-billed Nuthatch ♂ jv. Santa Ana, 6000 ft.
7704 " " ♂ jv. "
7705 Pygmy Nuthatch ♀ jv. "
7706 " " ♂ jv. "
7707 " " ♀ " "

Aug. 2

7708 Western Warbling Vireo ♀ Lost C., 6500 ft.
7709 Cassin Purple Finch ♂ " " " "
7710 Western Tanager ♂ jv. " " " "
7711 Black-headed Grosbeak ♂ jv. " " " "
1782 Peromyscus gambeli ♀ (5 emb.) So. Fork, 6200 ft.
1783 " " ♂ " " "

Yesterday, down by the "South Fork Cabin", about 6000 ft I met a good view for some minutes of a Flicker, or rather Willow Woodpecker. (?) It had been calling for some time in the willow thickets & finally flew up onto a bare cedar stub in full view but too far off for a successful shot. I have heard notes for the past two weeks all along here, up to the lower end of Big Meadows, which I ascribed to the Nuttall Woodpecker, and these may have belonged partly or all to the Willow Woodpecker. The species bores freely in the willows lower down the Santa Ana & now like so many other species which ned lower down is moving up into the mountains. Families of

Black-headed Grosbeaks, Bush-tits, several Western Flycatchers, scores of Pac Rman Wrens, and even a good many linnets are moving up along the Santa Ana, where a month ago none of these species were to be seen. The Western and Traill Flycatchers have invaded the domain of the Gray Flycatcher, the each breeds in a very distinct belt (thus accounting for there being three distinct species of Empidonaces breeding in this one range of mountains). Warblers, (Lutescent, Yellow, Black-throated Gray, and Golden Pileolated) are passing thru in regular migratory fashion, tho not necessarily going beyond the confines of these mountains as yet. These birds are nearly all in full 1st winter, or annual, plumage, a few only, showing remnants of juvenal plumage. The adults of these species now are in very ragged and moulting plumage, and are extremely quiet and secluded. Today up on the flat between So. Fork and Lost Creek, we saw an adult (and very dark) Golden Eagle. It lit unaware on a branch not more than 50 yards from us. Adult & immature Western Red-tails are frequently seen

here up Fish Creek & South Fork R. Nuttall's
are often noted within hearing of camp.
Flickers, Redshafted, are noticeably more
common. Black Phoebes all closely
enough resembling juncos, are
very common along the stream (Santa Ana).
Birds both in species and individuals
are far more numerous now than they
were in June. Aside from the increase
actually resulting from reproduction, this
is undoubtedly to my mind due to
the extreme abundance now of both
vegetable & animal food, particularly the
latter. Flies, birds of the lower
valley & foothill region (now becoming
parched and less productive of food)
seem to be largely taking advantage
of. Insect larvae are abundant on
the foliage of willows, oaks, & pines; and
the air teems with gnats, flies, etc.,
which furnish ready provender for
the insectivorous birds. And even
normally seed-eaters, such as the gray
sparrows, are seen carrying larvae to their
full-grown, but teasing offspring. A special
feature of the past week or a little
more is the influx of numerous hummers.
Those taken have the gullets crammed with
gnats & small spiders. A significant coincidence

(perhaps?) is the bursting into bloom of quantities of Pentstemon labrosus, just about the time the hummers arrived, and the latter seems to be the only visitors to these flowers:— The structure of the latter, for, shows a clear case of ornithophily. The red-plumaged Allen & Rufous Hummers of rapid and erratic flight harmonize surprisingly with shimmering and gauzy patches of scarlet Pentstemons! We have failed to see a single Nighthawk anywhere since July 15 (at Dry Lake), tho in June they came regularly at dusk down along the Santa Ana below camp.

Aug. 3

7712	West. Warbling Vireo ♀	Santa Ana, 6600 ft.
7713	Linnet ♀ im.	" " " "
7714	Western Flycatcher ♂	" " " "
7715	Black-throated Gray Warbler ♀ im.	" " " "
7716	Gray Flycatcher ♀ jv.	" " " "
7717	" " ♀ jv.	" " " "
7718	West. Wood Pewee ♂	" " " "
7719	Mt. Chickadee ♂ jv.	" " " "
7720	Brewer Sparrow ♀ im.	" " " "
7721	Blackheaded Grosbeak ♀	" " "
7722	Green-tailed Towhee ♀ im	" " " "
7723	Sierra Junco ♀	" " " "
7724	" " ♂ jv.	" " " "
7725	Pygmy Nuthatch ♀ jv.	" " " "
7726	West. Chipping Sparrow ♀	" " " "

Aug. 4

1784 Myotis l. longicrus ♂ Santa Ana, 6100 ft.
1785 Peromyscus gambeli ♂ " " 6200 ft.
1786 " " ♀ " "
1787 Eutamias merriami ♀ " " 6100 ft.
7727 Rufous (?) Hummer ♀ " "
7728 Gray Flycatcher ♀ " "
7729 " " ♀ jv. " "
7730 Western " ♂ jv. "
7731 Rock-throated Gray Warbler ♂ im. " "
7732 " " " ♂ im. " "
7733 Calif. Yellow " ♂ im. " "
7734 Calif. Purple Finch ♀ " "
7735 " " " ♂ jv. " "
7736 Cassin " " ♀ jv. " "
7737 " " " ♂ " "
7738 Golden Pileolated Warbler ♂ im. " "
7739 Green-tailed Towhee ♀ im. " "
7740 " " ♀ im. " "
7741 Nuttall Woodpecker ♀ jv. " "
7742 " " ♀ jv. " "
7743 Black-headed Grosbeak ♂ " "
7744 " " ♀ jv. " "
7745 Lazuli Bunting ♀ jv. " "
7746 Olive-sided Flycatcher ♀ jv. " "
7747 " " ♀ jv. " "
7748 West. Wood Pewee ♂ " "
7749 Pallid Wren-Tit ♀ jv. " "
7750 Slender-bill Nuthatch ♀ im. " "

7751 Sierra Junco ♂ jv. Santa Ana, 6000 ft.
7752 " " ♀ jv. " " "
7753 West. Warbling Vireo ♂ im. " " "

Aug. 5

Prepared specimens and packed up.

Aug. 6.

Left So. for R. by Martin's wagon at 8:10 am, reaching 7-oaks 9:10; left 7-oaks by horse-back and pack at 10:30, getting to Harvey's for lunch at 1:45 P.M.; left Harvey's by stage at 2:10 and reached Santa Fé station at Redlands at 3:50. Left Redlands by S.P. at 4:30 & arrived home at Pasadena at 7:00.

11

1907 – June 13.

Left Redlands at 10:30 & came to Skinners, arriving at 2:10 P.M. Saw and heard at mouth of Mill Creek several Black-chinned Sparrows. Up a ways, saw White-throated Swifts. Left Skinners at 3:30 and arrived at Seven Oaks at 6:10 P.M. Saw and heard in Mt. Home canyon California Purple Finches, also the same species here at Seven Oaks.

June 14

Wakened at 4:40 this morning by the chorus of bird-voices around the resort here at Seven Oaks.

The singers were: Western Wood Pewee, Traill's Flycatcher, Pan-Rocky Wren, Bullock Oriole, Black-headed Grosbeak, Warbling Vireo, Western Robin, San Diego Song Sparrow, Calif. Yellow Warbler, & Western Tanager.

Came up to our old camp at mouth of South Fork this forenoon. On the way up (alt. about 5500 feet) found a Lazuli Bunting's nest 2 feet up in a sage (A. tridentata), with four small young. This was near a grassy cienega on the south-facing north side of the valley. Saw a Sierra Sapsucker on an alder by the stream. Also heard Black-chinned Sparrows all along the north wall of the canyon, nearly to the immediate slope of Sugarloaf.

June 15.

Went a little way up South Fork this morning. Found a Sierra Hermit Thrush's nest 3 feet up in a very young fir near the stream; altho there were but two eggs the old bird was sitting very closely and I presume it to be a full set. Also saw bob-tailed young Juncos.

June 16

Found a Green-tailed Towhee's nest today near camp. It was under a very small and scraggly specimen of

artemisia tridentata in an open space, fully 20 feet from any heavier brush or trees. The nest top was flush with the surface of the ground, almost touching the main stalk of the sage and overhung by the latter. The nest consisted of a basement formation of weed stems & coarse grass with one or two strips of cedar bark, lined with fine brown plant stems. There were four young about a week old. The parents showed solicitude by uttering the Kitten-like mew & a sharp peep from the neighboring bushes.

June 17

A Sparrow Hawk is often seen and heard around camp. Probably has a nest up the hillside where a brood of young appeared in July last year. Birds in general appear to be far scarcer than last year; or else very much shyer and quieter. The "wind-mill" jay is visiting camp again this year.

June 18-19

We went up to Dry Lake and Grayback.

7920 Sierra Hermit Thrush ♂. Dry Lake, 9000 ft. — June 18.
7921 Brewer Blackbird ♂ jv. " " " " " "
7922 Williamson Sapsucker ♂ " " " " " "
7923 Western Robin ♀ juv. " " " " " 19
7924 American Dipper ♂ juv. " " " " " "

At Dry Lake I found one lone juvenile Brewer's Blackbird which had undoubtedly wandered up from the breeding range somewhere below. We certainly found plenty to eat, for as we fed on the muddy east shore of the lake, other insects and little toads abounded. A Williamson Sapsucker's tamarack contained 47 well-formed holes, besides numerous smaller drillings. One excavation was occupied, as I could hear the "whinging" of young sapsuckers within. This was about 10 feet from the ground, one of the lowest nests of the series which extended up the dead pine fully 35 feet on all sides. The bird, shot, had its bill crammed with wood ants. Another hole in the same tree contained young Slender-billed Nuthatches. At an elevation of about 9200 feet, four miles straight back from Dry Lake, I found a Mountain Chickadee's nest four feet up in a rotted out knot hole of a tamarack pine. The nest was a rather scant accumulation of fur and down feathers. The seven eggs, nearly fresh, are remarkable as being unspotted. Saw one Golden Eagle fly across over Dry Lake. Saw a ♀ Cassin Purple Finch gathering stuff for a nest and nearby a nearly full-grown youngster being fed by its parents. Saw also and secured one, young robins. Western Chipping Sparrows were the most numerous

of any species, perhaps Audubon Warblers and Gray Flycatchers coming in next. Along the outlet stream, now large, below Dry Lake was a family of Dippers, one of which was taken. Along the "draw" to the east of Dry Lake were many fresh Mole workings, the highest I have seen. Along the western bank of the Lake, were quite a lot of Microtus burrows among the rocks, logs & Symphoricarpus bush, and one was seen and almost caught by dogs. Among butterflies I saw about the Lake, attracted by the warm wet places: Oglais milberti, Eugonia californica, Pyrgus montivaga, and Hesperia uncicolorum. The snow was very heavy on north slopes from below 9000 feet to the summit of Grayback, more than I ever saw before. But the nesting of birds seems to have been just as early as heretofore. On the summit of grayback, a ♂ Junco was singing from the very top of the cairn, and two Golden Eagles were circling off to the east of the peak. These were the only birds seen on top, tho I saw one yellow-headed Chipmunk, and many insects chilled on the snow-banks. Down the north ridge among the prostrate and dwarfed limber pines were a number of Nutcrackers, the young calling to be fed

with a nasal idiotic laughing note. The song of the Sierra Hermit Thrush, sounds clear, cold, and mellow. In the South Fork Cienega (about 6500 ft.), Juncos were common, and a nest was located and photoed. It was in a slight depression beneath the low grass & herbs of the meadow and contained 4 fresh eggs. Saw also in and about the Cienga: Sierra Sapsucker, Lincoln Sparrow, Western Robin, Stephens Fox Sparrow, Gray Flycatcher, Western Warbling Vireo, Calliope Hummer, White-headed Woodpecker, Western Bluebird, &c.

June 20

A rattlesnake 26 inches long, with 5 rattles incomplete, contained a 10 3/8 inch alligator lizard, straight-out, head posteriorly.

June 21.

Went down to Seven Oaks.

June 22.

Went over to Skinner's and back. In a golden oak near the Santa Ana, across the river from Schneider's Ranch (about 2 miles below Seven Oaks), I first heard and then saw a Hutton Vireo. The note was unmistakable. I was horse-back and had no gun. In Mountain Home canyon I saw and heard more California Purple Finches.

June 23

Came back up to So. Fork camp.

July 1

Heard a Horned Owl hooting on the canyon side below camp.

July 2

An immature Anna Hummer poised for a moment before a red sweater.

July 3

First young Audubon Warblers, 1 family, twittering impatiently as they are being fed, in a fir.

A gopher snake, 43 inches long, squirmed into camp this afternoon. In trying to make it pose for its photo, it was put in the hot sunshine and constantly poked back into a certain place. He of course kept starting off. Finally he seemed to succumb and give up completely. For he suddenly became quiet, opened his mouth, gasped quickly several times, assumed a tetanic rigidity, and — was dead. At least, four hours later, he was still rigid and his mouth, still open, was pretty well dried up. I "preserved" him, and found no cause for his death. I feel quite sure he was not injured.

July 4

Hiked down to Seven Oaks and back this forenoon. Dreadfully hot. Many young birds appearing. Saw at 7-oaks: young Nuttall Woodpeckers; two nests of Lewis's Western Gnatcatchers, House Finch, Ash-throated Flycatcher, etc.

July 5

This afternoon at 4:30 I saw three Black Swifts flying swiftly by overhead up the canyon. Saw a ♀ or young ♂ Rufous or Allen Hummer this morning. The Blue-fronted Jay, has a note precisely like the cry of a sparrowhawk.

July 6

Went up to Big Meadows this afternoon. Saw there a pair of Western Kingbirds, and some Brewer Blackbirds. Took a Rattlesnake, 37 inches long, 4 inches in girth and weight 1¼ lbs.

July 7

Near mouth of Lost Creek got a specimen of Diadophis amabilis. When alarmed it twisted its tail into a tight cork screw, which shone out conspicuous, the vermillion being on the outside, the way the tail was twisted. Up at the cienega on south side of Sugarloaf this afternoon saw three Black Swifts fly by going west.

July 9

Went up Fish Creek to aspen groves, photoing. Saw a Xerobates among the fallen leaves beneath a dense clump of aspens. Also took a new sort of Garter Snake on Santa Ana opposite mouth of Fish Creek. Heard a Poor-will across the creek from camp last night.

July 10.

Up to the cienega on South slope of Sugarloaf, 6700 ft., this evening, found a Lazuli Bunting's nest, 2½ feet up in sage, with three heavily-incubated eggs. Also another belonging to the same species, with precisely the same location, with three small young.

July 11.

On Santa Ana opposite mouth of Fish Creek, in a rotten pine stub is a Violet-green Swallow's nest with three ½-grown young and one egg. This is 8 feet up in an old wdpkr's hole. The nest was very scanty, of weathered grasses and a few feathers.

July 12.

Moved camp down the Santa Ana, to about ¼ mile below the "Cedar Cabin", elevation about 5500 feet. Took specimen of Lampropeltis v. multicincta.

July. 14

Found a Spurred Towhee's nest close to camp. It was on the ground, rim flush with surface, at base of Artemisia; made of weathered grasses cottonwood bark strips, lined with fine round grasses; contained four eggs.

July 15.

1 mile or so above Seven Oaks, near the pasture meadows, saw a Pacific Rattlesnake crossing the road; also full a dozen Horned Toads along the road. A great number of Cliff Swallows were

coursing about over the meadows, mostly young of the year; many were perching on bushes on the hillside above, twittering noisily. Saw several Cal'a Jays near Seven Oaks. A Dipper was noted near camp; also a Dipper, and a brood of young Cooper Hawks about the nest 30 feet up in alder. There must be a pair of these every mile or so all along the canyon.

July 16.

Came back to Pasadena. Just below Seven Oaks saw a family of 3 young Sierra Sapsuckers. Down Mountain House Canyon saw a Cooper Hawk carrying a California Woodpecker in its talons. Saw and heard the latter species in the pines around Glen Martin. At Skinner's noted Olive-sided Flycatcher, many Yellow Warblers, etc. Toward mouth Mill Creek and down its "wash", saw several Cactus Wrens, & Phainopeplas; nests of the former.

List of San Bernardino Mountain Plants

No. – Time of Blooming – Zonal Dist. – Exact Localities – Rel. Abund.

201. Silene { douglasii / verecunda } – July 10 to 27; Low. Trans.; along Santa Ana at So. Fork, Lost Cr. near Mouth, Fish Cr. near mouth; level ground under pines; fairly common.

202. Epilobium glaberrimum – Low. Trans. – July 9-27; along stream; Common; Fish Cr. & South. Fork near mouths, and main Santa Ana.

203. Astragalus hookerianus – June 10 - July 10; Low. Trans.; dry level ground; Abund. all along Santa Ana, 7-oaks to Big Meadows.

204. Draba corrugata – July 10-26; Fairly common in Upper Trans.; dry ground under pines; Fish Cr., south-facing slope at dry lake, one plant on summit of Grayback; along Santa Ana, 6500 to 6500 ft.

205. Castilleja stenantha – July 1 to 22; Common along Sugarloaf Cienega, So. Slope, 6300-6700.

206. Nicotiana { clevelandi / attenuata } – July 7, dry roadside along Santa Ana near So. Fork, rare; Big Meadows, July 24. (Abundant at Dobbe in Aug.)

207. Thalictrum polycarpum – June - July; Lower Transition; shady not too dry places; abundant; So. Fork, Fish Cr., Santa Ana.

208. Argemone platyceras hispida – June 25-July 27; along Santa Ana in sandy washes, at 7-oaks, mouths of So. Fork & Cienega Seca; scattering plants.

209. Gilia pungens { tenuiloba / hallii — June 10-July 11; Transition, abundant; So. slope Sugarloaf & summit (nearly, within 200 feet), along upper Santa Ana, Fish Cr., So. Fork, Lost Cr.

210. Pentstemon caesius — July 11 in full bloom; Canadian; common — Sugarloaf near summit and San Bern. Peak in Murray pine belt.

211. Erigeron concinnus aphanactis — July 11; common on open gravelly summit of Sugarloaf; Canadian?

212. Phacelia { eisenii / humilis? — July 11; com— [illegible] 9800 feet on Sugarloaf, under pines.

213. Solanum xanti intermedium — July 11-16; Transition; Sugarloaf, so slope, 9600 ft.; So. Fork at mouth, & along upper edge of big cr— 8000 ft.

214. { Castilleia (?) / Orthocarpus pilosus — July 11; common on summit of Sugarloaf on open gravelly ground; Canadian (?).

215. Pellaea wrightiana — July 11; So. slope Sugarloaf, dense low clumps in rock slides.

216. Stachys albens — July 1-27; abundant along streams; Santa Ana, 6000-6200 ft.

217. { Carum gairdneri? / Eulophus parishii — July 5-22; abundant in Sugarloaf Cienega, 6700 feet, So. slope.

218. Astragalus { oocalpus / parishii — June-July 4; Santa Ana, in shady places under trees or on north slopes.

219. { Hydastylis elmeri / Sisyrinchium californicum — July 5-22; So. slope Sugarloaf, 6700, growing in water in stream in Cienega; abundant

220. Eriogonum vimineum — July 7-25, Common in dryish sandy places along Santa Ana, 6000 ft. to Big Meadows.

221. Horkelia parryi — June 15 - July 27; abundant in semi-wet places along Santa Ana to 6500 ft., Fish Cr. & So. Fork.

222. Pentstemon palmeri - July 1-20; Lower Trans.; abundant everywhere - So. Fork, Fish Cr., Santa Ana from 7-oaks up, Sugarloaf to 8000 ft.

223. { Agoseris retrorsa / Troximon retrorsum - June 15 - July 2; Trans.; dryish north slopes, under blackoaks & willows; common on "flats" in blackoak belt; upper Santa Ana, So. Fork, Lost Cr.

224. Aquilegia truncata — June 25 - July 25; Along stream; mt. Home Cr.; Fish Creek; So. Fork; Upper Santa Ana; Transition: Common.

225. Hulsea vestita — June 9 - July 25; Dryish sandy places & under pines; Transition; common everywhere — Sugarloaf, Dry Lake, upper Santa Ana.

226. Lotus americanus — July 8 - 27; sandy levels among willows; Upper Santa Ana near mouth of Fish Cr.

227. Trifolium wormskjoldi — June & July; edges of streams, abundant; Upper Santa Ana & So. slope Cienega on Sugarloaf, 6700 ft.

228. Ranunculus sceleratus (?) — July 7 to 27; along edge of upper Santa Ana 6000 - 6500 ft. & around edge of Dry Lake, abundant.

229. Lotus oblongifolius — June - July; margin of upper Santa Ana, 6000 - 6500 ft.; common

230. {Thymocallis reflexa / Potentilla glandulosa nevadensis - June - July 5; in wetish places; fairly common

231. Hieracium albiflorum — July 1 - 15; So. Fork and Fish Cr., dryish places, under pines & firs.

232. Rosa californica glabrata — June & July; abundant in thickets in canyon bottom; Santa Ana & Big Meadows; Cienega on so. slope ridge of So. Fork.

233. Linum lewisii — June 10 - July 25; transition; common; dryish places under pines; upper Santa Ana, and on Black oak flats.

234. {Navarretia / Gilia densifolia / virgata sapphirina — July 8 - 27; abundant in dryish levels between pine thickets; Black oak flats & upper Santa Ana valley.

235. Eriophyllum confertiflorum trifidum — June 15 - July 15; abundant on dry slopes — upper & lower transition, chiefly latter.

236. Hymenopappus lugens — June 30 - July 25; not common; in Black-oak belt near Fish Cr., Lost Cr. & So-Fork; 6500 - 7000 ft.

237. Ceanothus {nevadensis? / integerrimus; - July 4 - 25; Upper sonoran into Lower Transition; Santa Ana,

south-facing hillsides up 6500 feet; So. Fork, ditto.

238. Equisetum funstoni July 1-10; So. Fork abundant in open places & dry.

239. Convolvulus { gracilentus / villosus } fulcratus — June 15 - July 15; Sugarloaf, on slope 6700 ft.; fairly common; Santa Ana to Big Meadows.

240. { Antennaria rosea / Antennaria speciosa } E. Nelson — July 5-20; dryish places. Sugarloaf, on slope, 6700 ft.; & Fish Cr., 6700 ft.

241. Brunella vulgaris — June - July; abundant in Cienegas on so slope Sugarloaf 6300 - 6700, & along Santa Ana, 6000 ft.

242. Hypericum anagalloides, nevadense — June & July; Cienega on So. slope of Sugarloaf, 6700 ft., abundant.

243. Tallium multiflorum July 6; Santa Ana bottom near So. Fork in dry place; rare.

244. Phacelia { hispida / distans } — June - July 5; under pines along Santa Ana near mouth of So. Fork.

245. Phacelia { nemophiloides / davidsoni } — June - July 25; abundant under pines all along Santa Ana Valley.

246. Hieracium { grimellii / horridum } — June 29 - July 10; Fish Creek, 6600 - 6700 feet; dryish levels under pines.

247. Montia spatulata — June; under pines before ground dried out much; all along Santa Ana valley & lower Fish Cr. & So. Fork, especially on north-facing or shaded slopes.

248. Pentstemon labrosus — July 8 to 27; in profusion all along upper Santa Ana Valley & on Black oak flats along So. Fork up to 7200 ft.

249. Lotus { davidsonii / nevadensis — spreading mats on levels & slopes of Lower Transition to head of Santa Ana valley, June & July — Black oak belt to 7500 ft.

250. Gilia { collina / tenuiflora — June to July 15; abundant along valley of upper Santa Ana on levels mostly often under pines.

251. Achillea millefolium lanulosa — June & July; profuse everywhere; edges of ciengas & dry places; around Sugarloaf cienega; So. Fork cienga to 8000 ft., etc.

252. Potentilla { nuttallii / gracilis — June - July 2; fairly common near stream, mouth of So. Fork.

253. Calochortus { leichtlinii / invenustus — June; abundant in Black oak belt down to lower edge of Transition; upper Santa Ana, Fish Cr., So. Fork.

254. Mimulus { nasutus / langsdorffii tilingii — June 5 - July 25; abundant along streams & in ciengas; So. Fork, Fish Cr., Sugarloaf so. slope Cienega.

255 Chaenactis santolinoides — June 20 - July 15; Common locally; Fish C., So. Fork; dry places under pines.

256. Senecio { sparsilobatus / neo-mexicanus — June; rare; Lower So. Fork, 6300 ft.; Santa Ana, 6000 ft.; shelving bank & under pines.

257. {Navarretia densifolia / Gilia densifolia} — July 18 - Aug.; Upper austral into Transition, in sage belt; Upper Santa Ana valley on north side; common.

258. Silene parishii — July 18; Fish Cr. canyon, 6600 ft.; dryish canyon side = only locality; evidently rare.

259. Salix bigelovii — abundant willow from 6500 (sparingly) up to 9000 feet in dryish pockets & edges of meadows; grows in tall straight (nearly)-trunked groups sparsely-leaved except at crowns; has a decided grayish caste of foliage.

260. Euphorbia palmeri — June to July 8; abundant everywhere on dryish ground; Transition up to 7500 feet around So. Fork Cienega.

261. Monardella lanceolata — July 10 - Aug.; abundant on dry slope in sage belt; Upper austral into transition.

262. Lupinus {austromontanus albifrons} — June - July; Dryish slopes in sage belt, Upper Austral & Transition; abundant all along So. side of Santa Ana to Big Meadows.

263. Sambucus — July 10 - Aug.; not common; clumps noted in Fish Cr. up to 7500 ft., on So. Fork & in Upper Santa Ana.

{Razoumofskya occidentalis
~~267.~~ {Arceuthobium occidentale — Abundant
mistletoe on pines (Jeffrey & yellow) especially
young trees.

~~265.~~ Œnothera hirsuis hookeri — July Aug.;
very common in meadows & slopes / cienegas;
So. slope sugarloaf, 6500-6700 ft.; along Santa Ana;
So. Fork at mouth.

~~266.~~ Symphoricarpus parishii — July 11-16;
Canadian mostly; Sugarloaf near summit
(down to 9000 about); around Dry Lake.

~~267.~~ Dodecatheon alpinum — June 16-July 16;
abundant on So. Fork Cienega, 7500-8500 ft.;
scatteringly down So. Fork to Santa Ana, 6200 ft.

~~268.~~ Erysimum asperum — June-July; abundant
up thru Transition; everywhere up to South-facing
hillside by Dry Lake, 7000 ft, & same elevation
on south side of Sugarloaf.

~~269.~~ Ranunculus {oxynotus
{eschscholtzii — July 16; by snow
back in north-west side of Crayback, 10,500 ft.
in a few square yards of rock slide.

270. Carex preslii — July 16 11,000 feet on
N-W slope (rockslide) of Crayback; common.

~~271.~~ Ribes cereum — June-July 16; abundant
in upper Transition; along streams, etc., to
above Dry Lake & nearly to summit of Sugarloaf

~~272.~~ P. ciliaris semibarbata — June-July 16;
abundant on floor under pines, thru Transition.

273. { Erytropis oreophila — July 16; summit San Gorgonio PK, 11,500 ft. - 11,000 ft.; common on bare gravel patches between boulders.

274. Potentilla wheeleri — July 16, summit San Gorgonio PK; common on gravel plats among rocks.

275. Erigeron compositus discoideus — July 16; Summit of Grayback (= San Gorgonio PK.) common in gravel patches.

276. Hulsea vestita pygmaea — July 16; sparse on summit of Grayback, in gravel between boulders.

277. Erigeron foliosus — July 20 - Aug.; abundant in dryish places everywhere, especially in Black oak belt.

278. { Agoseris heterophylla / Troximon heterophyllum — June - July; common in meadow at mouth of South Fork, 6200 ft.

279. Gilia androsacea / montana — June; extremely profuse thruout transition; everywhere, especially in Black oak belt.

280. { Lappula occidentalis / Echinospermum redowskii — June 26 - July; abundant in meadow at mouth of So. Fork, 6200 ft.

281. Erigeron divergens — June - Aug.; abundant everywhere up thru transition; tho not so noticeable in the sage belt.

282. Eremocarya lepida — June; common in open sandy places along Santa Ana bottom.

283 *Veronica americana* — June-July; abundant in cienegas; on So slope Sugarloaf, 6300 - 6700 ft; along Santa Ana; So. Fork; & Cienega at Dry Lake (south-facing slopes), 9100 ft.

284. *Veronica serpyllifolia* - June 26; margin of stream on Santa Ana - 6200 ft.; scarce.

285. *Alsine longipes* / *Stellaria longipes* June 26; common at margin of stream; Santa Ana, 6200 ft.

286. *Œnothera californica* — June - Aug.; abundant along rd of Santa Ana Canyon up to Big Meadows, and up into hill-sides.

287. *Pipiocalyx circumscissus* / *Eremocarya micrantha* — June 27; common in open sandy patches on Santa Ana bottom, 6200 ft.

288. *Viola blanda* — June 15; abundant in Cienegas at head of So. Fork, 7500 - 8500 ft.

289. *Hemizonia wheeleri* — June - Aug.; abundant everywhere up thru Transition (to 7500 feet on South Fork trail).

290. *Sisymbrium canescens* — June 27; sparse along stream, Santa Ana, 6100 - 6200 ft.

291. *Geum macrophyllum* — June-July; sparse along lower South Fork, 6200 - 6400 ft.

292. *Sidalcea malvifolia* — June - Aug.; common in meadows, not too wet; So Fork (mouth and cienega at 7500 ft.); So. slope Sugarloaf, 6300 6700 ft.

293. Ceanothus confusus — June; abundant thru Transition especially upper; Dry Lake (south Kaweah); So. Fork up to 8000 ft.

294. Lupinus {elmeri / albicaulus — June-July; abundant in Upper Transition; in Fish Cr. + So. Fork Canyons + Black Oak belt.

295. Rubus parviflorus — June-Aug; abundant in shady moist canyons; So. Fork from mouth to 8000 feet; Mountain Home Canyon.

296. Viola {aurea? / purpurea pinetorum — June; fairly common; Santa Ana, 6200 ft.; Fish Creek, 6500-6700 ft.; Black Oak belt, 6400-6700 ft.

297. Fragaria californica — June-July; fruit July 20-Aug.; abundant along lower So. Fork, 6200-6500 ft.; Fish Creek, 6600 ft.

298. Gayophytum ramosissimum — June 26-July; along Santa Ana, in level stretches, 6200 ft.

299. Mentzelia — June-July 15; common in level sandy stretches, 6000-6300 ft.

300. Chrysothamnus graveolens glabratus — last of Aug.; the abundant "rabbit-brush" along Santa Ana, 7-oaks to Big Meadows, where there is a many acre tract. Apparently upper austral + transition.

301. Artemisia tridentata — last of Sept.; the abundant sage brush; upper austral + Transition; mostly on desert side of divide; not down Santa Ana = 7-oaks.

302. Solidago californica, — aug. 5 - Sept.; very common thruout transition. Black Oak belt; Santa Ana; Bluff Lake.

303. Alnus rhombifolia — The common alder along most streams from foothills up to 7000 feet in Fish Cr. & So. Fork canyons.

304. Stephanomeria exigua — July 21 thru Aug.; abundant among "rabbit weed" all along Santa Ana to Big Meadows.

305. Eriogonum stellatum — July 27 thru Aug.; common on hillsides in Sage belt; South Fork near mouth; Santa Ana.

306. Monardella odoratissima — July 27 thru Aug.; abundant thruout transition.

307. Audibertia purpurascens / Salvia carnosa compacta — July 25 thru Aug.; Common in Sage belt & upper Santa Ana 6000 - 6700 ft.

308. Haberneria leucostachys — July 10; Fish Creek canyon 6700 ft.; Common locally.

309. Amorpha californica — July 15 to Aug. 15; abundant & representative of Black Oak belt.

310. Sedum obtusatum — July 29; South Fork 7500 feet on shaded canyon side under pines in rocks; scarce.

311. Veronica richardsoni — June - Aug.; Common along streams everywhere, up to So. Fork Ciénega 7500 ft. Fish Cr. Lost Cr.

312. Pyrola pallida — July 28, So. Fork 6300 ft.; only one seen; in canyon bed under cedar.

313. (E)nanthe californica — July 15-Aug; common in So. Fork Cienega 7500 ft, & Sugarloaf cienega 6200 - 6700 ft., So. slope.

314. Corallorhiza multiflora — July 15; Dry Lake, 7000 ft. rather beneath pines.

315. Nasturtium { officinale / curvisiliqua } — July - Aug.; Cienega on So. slope Sugarloaf, 6400 ft., common.

316. Sonchus asper — July - Aug.; Common in Sugarloaf cienega 6200 - 6500 ft.

317. Gnaphalium chilense — July - Sept.; So. slope Sugarloaf at margin of cienega, 6300-6700 ft.

318. Cardunus bernardinus — July - Aug.; abundant in places in Black Oak belt; a great attraction for many butterflies, such as Argynnis.

319. { Oxygraphis cymbalaria / Ranunculus cymbalaria } — July - Aug.; cienega on So. base Sugarloaf, 6300 ft., on patch.

320. Sisyrinchium { leptocaulon / bellum } — July; Cienega on So. base Sugarloaf 6300 - 6500 ft, common.

321. Aster fremonti parishi — July 28 - Aug.; Edge of Sugarloaf Cienega, 6300 ft.; also margin of Santa Ana, 5900 ft.; not very common.

322. Erodium cicutarium — last of July, new crop induced by thunderstorms; common in sage belt up Santa Ana bottom, to 7-oaks / Big Meadows.

323. *Artemisia dracunculoides* — Aug. 4 - Sept; Common in sandy places along Santa Ana, at mouth of So. Fork.

324. *Pentstemon bridgesi* — July 20 - Aug., locally common along Santa Ana, 6100 ft. & in Hudsonian belt up to 6700 ft.

325. *Solidago confinis* — Aug. 3 - Sept.; scatteringly common along Santa Ana, So. Fork to Big Meadows, near stream.

326. *Chrysothamnus tortifolius* — Aug. 3 - Sept.; common along Santa Ana especially just below Big. Meadows on bottom 6300 to 6700 ft.

327. *Tetradymia canescens* — July 24 - Aug.; Common locally on So. Fork trail, about 7000 ft; and at lower end of Big Meadows, on dryest exposed & gravelly slopes.

328. *Mimulus cardinalis* — July 22 - Aug. 2; locally common; lower Fish Cr. & Lost Cr., about 6500 ft.

329. *Clematis ligusticifolia* - Aug. 2 - Sept.; Common in lower Lost Cr. Canyon 6300 - 6500 ft; also along Santa Ana, 6200 ft.

330. *Pyrola secunda* — Aug. 2 — Lost Cr., 6700 ft.; only locality; along stream.

331. *Castilleja* { *montana* / *minnata* } - June - Aug.; abundant along streams up to 7000 ft.; Transition.

332. *Senecio* { *trigonophyllus* / *triangularis* } - July 22; South Fork along stream 6200 ft; & in ciénaga 7500 ft.

333. Helenium bigelovii — July Aug.; in Ciénega on South slope Sugarloaf 6 30 - 6 70 ft.; common by running water.

334. Lilium parryi — July 18 - Aug.; locally common in watered canyons:- Fish Cr., Last Cr., So. fork up to 7500 ft.; So. slope Sugarloaf, 6500 ft.

335. {Erudeophytum parishii / Velaëa parishii} — June - July; abundant along Santa Ana under pines & in open 6000 - 6600 ft.

336. Sarcodes sanguinea — June - July; abundant Upper Transition.

337. Hypericum scouleri — June - July; common along streams. Lower Transition.

338. Castilleja martini — June — abundant on dry exposed slopes. Lower Transition

339. Cornus {occidentalis / pubescens} californica? — July 10; Fish Cr. - 6700 - 6900 ft.; common in damp shaded bottom.

340. {Eriogonum trichopodum / Acanthoscyphus parishii} — July 23 - Aug.; common on open bottom of Santa Ana, 6100 - 6500 ft.

341. Polygonum exile Eastwood - July 22 - Aug.; spring up profusely after thunder-showers; in levels of Santa Ana 6000 - 6 300 ft.

342. Melica stricta Bolander.

343. Agropyrum arenicola

344. Bromus marginatus

345. Koeleria cristata

346. Agropyrum gmelini

347. Sitanion villosum

348. Sitanion jubatum

349. Juncus macrophyllus

350. (Cyperus) Scirpus microcarpus

351. Eleocharis montana

352. (Gastridium lendigerum) Polypogon monspeliensis

353. Juncus effusa

354. Boutelova oligostachys

355. Salix lasiandra Benth. Very large trees in grove at So. Fork cabin on Santa Ana, 6000 ft.; also in Fish Cr. Canyon at about 6900 ft.

356. Salix irrorata Anderson. The abundant species all along Santa Ana.

357. Populus angustifolia. Common along Santa Ana from 6100 feet (½ mile or so below mouth of So. Fork) up nearly to Big Meadows, 6600 ft. In groves of large size perhaps 40 feet high in extreme cases.

358. Populus trichocarpa. The common cottonwood along streams up to 6700 ft. in Fish Cr., So. Fork, etc.

359. Populus trichocarpa (?) The "balm-o'-gilead growing in Fish Cr. Canyon, 7500 feet.; large green barked & smooth, tree; very balsamy; looked conspicuously different from cottonwood (trichocarpa), growing lower down; leaves very much larger & fewer.

360. Populus tremuloides — Only in Fish Cr. canyon at 7000 - 7600 ft; in elegant groves of smallish slender trees.